

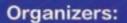
The 5th International Forum on Big Data for Sustainable Development Goals

FBAS 2025

6-8 September, 2025 Beijing China

Programme









FBAS and FBAS 2025

FBAS is an annual international conference initiated and hosted by the International Research Center of Big Data for Sustainable Development Goals (CBAS). In 2021, President Xi Jinping sent a congratulatory letter to the founding conference of CBAS and the first FBAS, expressing hope that all parties would fully utilize the CBAS platform and the forum to support sustainable development through big data, enhance international cooperation, and contribute to the implementation of the 2030 Agenda and the promotion of a shared future for humanity.

The FBAS aims to establish a global high-level exchange platform, promote the sharing of methodologies, technical research, application cases, and experiences related to big data and digital technologies, and support mechanisms that facilitate the achievement of global sustainable development goals.

To date, the FBAS has successfully held four sessions, attracting nearly 2,000 experts from more than 90 countries. It has become a vital international exchange platform for relevant UN agencies, domestic and international research institutes, government departments, enterprises, and international organizations to engage in scientific and technological cooperation.

The year 2025 marks the 10th anniversary of the United Nations 2030 Agenda for Sustainable Development. Despite a decade of efforts, the world still faces numerous challenges on the path to achieving the Sustainable Development Goals (SDGs), necessitating deeper cooperation and innovative practices. Digital technologies, represented by Earth observation, big data, and artificial intelligence, are capable of bringing about innovative changes in multiple aspects of SDG monitoring and evaluation. They also drive the formulation and implementation of integrated solutions to sustainable development challenges across sectors and regions.

From 2021 to 2024, the Chinese Academy of Sciences successfully hosted four consecutive International Forums on Big Data for Sustainable Development Goals. The 5th International Forum on Big Data for Sustainable Development Goals will be held in Beijing from September 6th to 8th, 2025. This forum will bring together top scientists, policymakers, industry leaders, and practitioners from around the globe to explore how to innovatively leverage digital technologies to accelerate the achievement of the SDGs, injecting new momentum and wisdom into global sustainable development.

Hosted by



Chinese Academy of Sciences (CAS)

Organized by



International Research Center of Big Data for Sustainable Development Goals (CBAS)



Aerospace Information Research Institute (AIR), CAS

Supported by



United Nations Department of Economic and Social Affairs



United Nations Development Programme



United Nations Environment Programme



United Nations Office for Outer Space Affairs



Food and Agriculture Organization of the United Nations



United Nations Convention to Combat Desertification



United Nations Human Settlements Programme



The World Academy of Sciences for the advancement of science in developing countries



International Decade of Sciences for Sustainable Development



International Partners

(Listed in no particular order)



United Nations Office for South-South Cooperation



Group on Earth Observations



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Digital Belt and Road Program



CAS-TWAS Centre of Excellence on Space Technology for Disaster Mitigation

Co-Organizers

CAST-UN Consultative Committee on Disaster Risk Reduction China Agricultural University China Institute of Water Resources and Hydropower Research China Population and Development Research Center Chinese National Committee of International Society for Digital Earth East China Normal University **Europe commission GOSC International Programme Office Hainan University Henan University Hubei University** Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences Institute of New Economic Development Institute of Oceanology, Chinese Academy of Sciences Institute of Tibetan Plateau Research, Chinese Academy of Sciences **Keio University** Land Information and Management System-Centre of Excellence (LIMS-CoE) Pakistan Nanjing Normal University **Nanjing University** Nanjing University of Information Science and Technology Ningbo University

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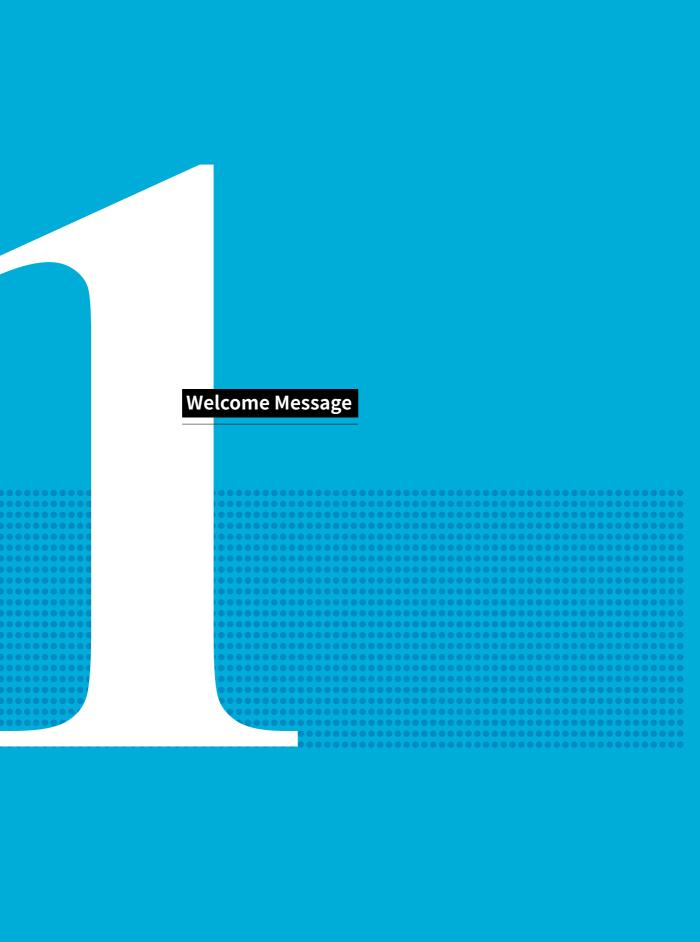
WFEO Committee on Disaster Risk Management

Wuhan University of Technology



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Welcome Message

The year 2025 marks the 10th anniversary of the United Nations' 2030 Agenda for Sustainable Development and is a pivotal year for the global efforts towards the Sustainable Development Goals (SDGs). Over the past decade, while the international community has made important progress in areas such as eradicating extreme poverty and transitioning to clean energy, challenges like intensified climate change, drastic biodiversity loss, and food security crises continue to escalate. The latest United Nations assessment reveals that nearly 40% of the measurable SDGs are still off



track, with some goals experiencing systemic regression due to compounded crises. Faced with this common challenge that concerns the fate of humanity, we need more than ever to anchor ourselves in science and set sail with big data, to foster collaborative scientific actions that transcend national and disciplinary boundaries.

The integration of big data and artificial intelligence provides an invaluable tool to facilitate global efforts to achieve sustainable development. Digital technologies not only dynamically monitor progress towards goals and precisely identify bottlenecks but also provide innovative solutions for complex issues such as climate resilience, ecological protection, and energy transition through interdisciplinary information integration and intelligent analysis. Over the past 5 years, the International Forum on Big Data for Sustainable Development Goals (FBAS) has been committed to building a global collaborative scientific platform that promotes the sharing, innovation, and policy coordination of digital technologies, while facilitating the transformation of big data from an information resource to a governance paradigm.

On the 10th anniversary of the 2030 Agenda and 5th anniversary of the FBAS forum, the 5th International Forum on Big Data for Sustainable Development Goals will be held in Beijing from September 6 to 8, 2025. The theme of forum "Digital Intelligence Driving Sustainable Development: The 10th Anniversary of the 2030 Agenda," will define the focus of the event towards use of digital and AI technologies to address zero hunger, clean water and sanitation, affordable and clean energy, sustainable cities and communities, climate action, life below water, life on land, and integration and intersection among SDGs. It will feature discussions on several topics, such as leveraging big data services to achieve sustainable development goals, harnessing AI to empower global sustainable development, exploring policy guidance and digital intelligence industry to drive regional sustainable development, fostering global partnerships to accelerate progress towards sustainable development goals, and encouraging youth innovation to co-creating a sustainable future.

With less than five years remaining until 2030, every technological breakthrough, policy dialogue, and experience-sharing can provide a significant advantage in reducing current lags in the SDG targets.

To this end, we sincerely invite scientists, policymakers, business leaders, and representatives of social organizations from around the world to gather in Beijing during the FBAS 2025. Let us share our wisdom, spark innovative thinking, and forge alliances for action, together drawing up a global roadmap for digital intelligence-driven sustainable development.

Let us reflect on the past decade as a mirror and take the last five years as a milestone, and move forward together in collaboration to launch the "sprint action" for the 2030 Agenda. Only by working together today can we achieve shared prosperity tomorrow.

Chair of the 5th International Forum

on Big Data for Sustainable Development Goals



Chair



GUO Huadong
Director General of the International
Research Center of Big Data for Sustainable
Development Goals (CBAS)

Scientific Committee

Co-Chairs



XU Guanhua
Former Minister of Ministry of Science and
Technology of the People's Republic of
China



Csaba Kőrösi President of the 77th United Nations General Assembly

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Quarraisha Abdool Karim	The World Academy of Sciences
Alessandro Annoni	International Society for Digital Earth
Thomas Blaschke	University of Salzburg
Irina Bokova	International Science Council's Global Commission on Science Missions for Sustainability
Valery Bondur	Russian Academy of Sciences
CHEN Deliang	Tsinghua University
CHEN Ge	Ocean University of China
CHEN Jingming	The Academy of Science of the Royal Society of Canada
Johannes Cullmann	Scientific Advisor to the 77th President of the UN General Assembly
Jay Famiglietti	Arizona State University

Hiromichi Fukui	Chubu University
FU Kun	Aerospace Information Research Institute, Chinese Academy of Sciences
Gregory Giuliani	University of Geneva
GONG Jianya	Wuhan University
GONG Ke	Nankai Univerisity
GONG Peng	The University of Hong Kong
Ameenah Gurib-Fakim	Former Presidents of Mauritius
Matthew Hansen	University of Maryland, College Park
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Simon Hodson	Committee on Data of the International Science Council
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Ibrahim Thiaw	Former Under-Secretary-General and Former Executive Secretary of the UNCCD
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WANG Jian	Zhejiang Lab
WANG Qiao	Beijing Normal University
WU Guoxiong	Institute of Atmospheric Physics, Chinese Academy of Sciences
WU Yirong	Aerospace Information Research Institute, Chinese Academy of Sciences
XIA Jun	Wuhan University
ZHANG Bing	Aerospace Information Research Institute, Chinese Academy of Sciences
ZHANG Renhe	Fudan University
ZHU Min	Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences

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LIU Jie	International Research Center of Big Data for Sustainable Development Goals (CBAS)
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CHEN Min	Nanjing Normal University

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CHEN Yu	International Research Center of Big Data for Sustainable Development Goals (CBAS)
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LIU Min	East China Normal University
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LIU Yalan	Aerospace Information Research Institute (AIR), Chinese Academy of Sciences (CAS)
LU Linlin	International Research Center of Big Data for Sustainable Development Goals (CBAS)
LUO Lei	International Research Center of Big Data for Sustainable Development Goals (CBAS)
Hamid Mehmood	United Nations Office for Outer Space Affairs
MEI Linlu	International Research Center of Big Data for Sustainable Development Goals (CBAS)
MU Jingchuan	United Nations Office for South-South Cooperation
Robert Ndugwa	United Nations Human Settlements Programme

NIE Sheng	International Research Center of Big Data for Sustainable Development Goals (CBAS)
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Prajal Pradhan	University of Groningen
REN Quanying	United Nations Environment Programme (UNEP)
Marcelin SANOU	Panafrican Agency of the Great Green Wall
Rajib Shaw	Keio University
SHEN Guozhuang	International Research Center of Big Data for Sustainable Development Goals (CBAS)
SHEN Qian	International Research Center of Big Data for Sustainable Development Goals (CBAS)
SHI Lijuan	Henan University
SUN Xinzhang	International Research Center of Big Data for Sustainable Development Goals (CBAS)
TANG Yixian	International Research Center of Big Data for Sustainable Development Goals (CBAS)
Shahina Tariq	Land Information and Management System, Islamabad Pakistan
WANG Fan	Institute of Oceanology, Chinese Academy of Sciences
WANG Jie	Pengcheng Laboratory
WANG Juanle	Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
WANG Lei	International Research Center of Big Data for Sustainable Development Goals (CBAS)
WANG Ning	International Research Center of Big Data for Sustainable Development Goals (CBAS)
WANG Shenglei	International Research Center of Big Data for Sustainable Development Goals (CBAS)
WU Xihong	Peking University
XING Qiang	International Research Center of Big Data for Sustainable Development Goals (CBAS)
XUE Cunjin	International Research Center of Big Data for Sustainable Development Goals (CBAS)
XUE Yong	Nanjing University of Information Science and Technology
Muhammad Waqar Yasin	Land Information and Management System Centre of Excellence , Islamabad Pakistan

Digital Intelligence Driving Sustainable Development: The 10th Anniversary of the 2030 Agenda

YU Le	Tsinghua University
YUE Tianxiang	Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
ZHANG Li	International Research Center of Big Data for Sustainable Development Goals (CBAS)
ZHANG Lili	GOSC International Programme Office
ZHANG Tingting	International Research Center of Big Data for Sustainable Development Goals (CBAS)

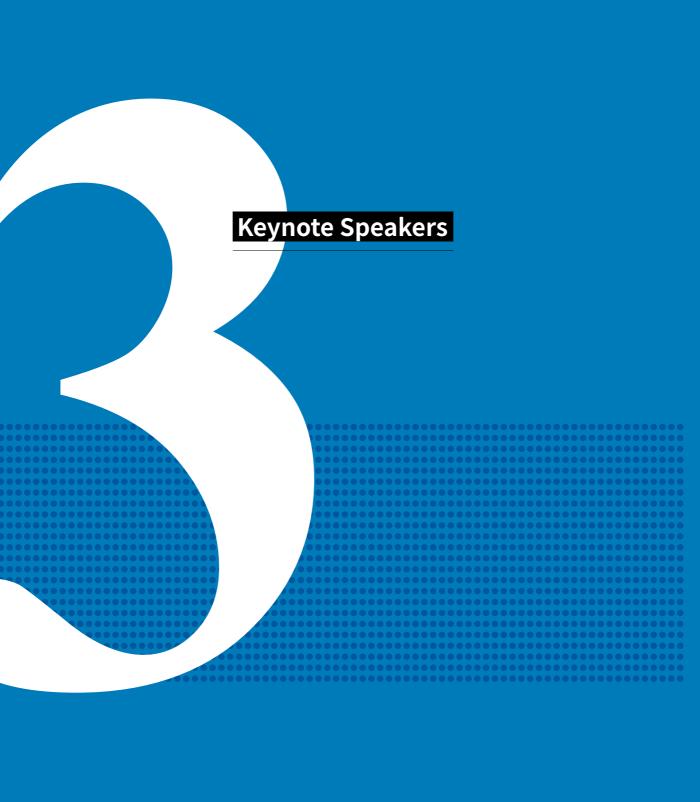
Secretariat

Secretary-General

WANG Lei

Members (Alphabetical order by last name)

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Keynote Speakers



Quarraisha Abdool Karim

President of the World Academy of Sciences (TWAS)

Abdool Karim, is an infectious diseases epidemiologist whose seminal contributions spanning over three decades have shaped the global HIV prevention landscape, notably in prevention technologies for women. She demonstrated that ARVs prevent sexually transmitted HIV that laid the foundation for HIV pre-exposure prophylaxis (PrEP); and has provided insights in Africa and globally on the impact of Covid-19 on HIV and in the evaluation of Covid-19 vaccines and therapeutics. Abdool Karim is the President of the World Academy of Sciences (TWAS). She is an elected member of the National Academy of Medicine (USA); and Fellow of The World Academy of Science, Royal Society of South Africa, Academy of Science of South Africa and the African Academy of Science. Her research contributions have been recognized nationally and internationally with over 30 honors including South Africa's Order of Mapungubwe, 2014 TWAS-Lenovo Prize; the John Dirks Canada Gairdner Global Health Award; the 2020 Christophe Mérieux Prize; and the 4th Hideyo Noguchi Africa Prize for Medical Research. She is the Associate Scientific Director of CAPRISA; Professor in Clinical Epidemiology, Columbia University; and Pro-Vice Chancellor for African Health, University of KwaZulu-Natal, South Africa.



Johannes Cullmann

Scientific Advisor to the 77th President of the UN General Assembly

Johannes Cullmann is Scientific Advisor to the President of the UN General Assembly and coordinates sustainable development related issues in the Office of the President, and the vice-chair of UN water. He is on loan from the World Meteorological Organization, where he has served eight years as lead for water and climate activities.

Johannes moved to Geneva from the German Federal Institute of Hydrology, where he served as director responsible for strategy, science and partnerships. Prior to this, Johannes coordinated the German Transportation Ministry's international water affairs and directed the German committee for the water programmes of UNESCO and WMO. He was Senior Advisor to WMO's water activities and President of UNESCO's Intergovernmental Council on water from 2012 to 2014. In his function as a department head in the German Federal Institute for Hydrology, he was the German representative to the Commission for the Hydrology of the Rhine River and co-organised the first climate change impact analysis for the Rhine River.



GUO Huadong

Director General of the International Research Center of Big Data for Sustainable Development Goals (CBAS)

GUO Huadong is the Director General of the International Research Center of Big Data for Sustainable Development Goals (CBAS), an Academician of Chinese Academy of Sciences (CAS), a Foreign Member of the Russian Academy of Sciences, a Foreign Member of the Finnish Society of Sciences and Letters, and a Fellow of TWAS. He presently serves as Honorary President of the International Society for Digital Earth (ISDE), Director of the International Center on Space Technologies for Natural and Cultural Heritage under the Auspices of UNESCO, Chair of the Digital Belt and Road Program, and Editor-in-Chief of the International Journal of Digital Earth and the journal of Big Earth Data. He served as a member of the UN 10-Member Group to support the Technology Facilitation Mechanism for SDGs (2018-2021), Chairman of the International Committee of Remote Sensing of Environment (2017-2020), President of ISDE (2015-2019), and ICSU Committee on Data for Science and Technology (CODATA) (2010-2014). He specializes in remote sensing, radar for Earth observation, and Digital Earth science. He is the Principal Investigator of Moon-based Earth Observation Research Project of National Natural Science Foundation of China and the Chief Scientist of the Big Earth Data Science Engineering Project of CAS. He has published more than 500 papers and 24 books and is the awardee of 18 domestic and international prizes.



Ameenah Gurib-Fakim

Former Presidents of Mauritius

Ameenah Gurib-Fakim has served as the 6th and First Female President of the Republic of Mauritius (2015-2018). Prior to that, she has been the Managing Director of the Centre International de Développement Pharmaceutique (CIDP R & I) as well as Professor of Organic Chemistry with an endowed chair at the University of Mauritius. Since 2001, she has served successively as Dean of the Faculty of Science and Pro Vice Chancellor (2004-2010).

She has authored and co-edited 30 books, several book chapters and scientific articles in the field of biodiversity conservation and sustainable development. Elected Fellow of several academies and societies, Ms Gurib-Fakim received several international prizes including the 2007 l'Oreal-UNESCO Prize for Women in Science and the African Union Commission Award for Women in Science, 2009. In 2021, she has been appointed as Distinguished Professor at the John Wesley School of Leadership, Carolina University, USA.

In June 2016, she was in the Forbes List for the 100 'Most Powerful women in the world' and 1st among the Top 100 Women in Africa Forbes List 2017, 2019. She is honoured as one of Foreign Policy's 2015 Global Thinkers and is the recipient of 7 Honorary Doctorate.



Csaba Kőrösi

President of the 77th United Nations General Assembly

As a career diplomat, he has spent his entire professional life in public service, combining national duties with assignments received from various international communities.

He has held several high-ranking positions, including Deputy State Secretary in charge of security policy, multilateral diplomacy and human rights; Vice-President of the UN General Assembly (2011-12); State Secretary for Environmental Sustainability, Office of the President of Hungary (2015-2022).

As Director (State Secretary) of the Office of the President of Hungary, he was involved in the High-level Panel on Water, co-convened by the Secretary-General and the President of the World Bank Group; in the Water and Climate Leaders Panel, co-convened by the Secretary-General of the World Meteorological Organization and the President of UN-Water.

He was co-chair of the UN intergovernmental process (Open Working Group of the General Assembly on Sustainable Development Goals) tasked with producing the 2030 Agenda for Sustainable Development and the Sustainable Development Goals at its heart.

He is a founding member of the Hungarian Scientific Panel on Climate Change, a member the Presidential Committee on Sustainable Development at the Hungarian Academy of Sciences.

Csaba Kőrösi is Distinguished Fellow of the Japan International Cooperation Agency Ogata Sadako Research Institute, Fellow of the International Research Center of Big Data for Sustainable Development Goals, Chinese Academy of Sciences, and Honorary Fellow of the International Science Council.



Ibrahim Thiaw

Former Under-Secretary-General and Former Executive Secretary of the UNCCD

Ibrahim Thiaw is Former Under-Secretary-General and Former Executive Secretary of the United Nations Convention to Combat Desertification (UNCCD) during February 2019 and August 2025.

Mr. Thiaw brings to the position 40 years of experience in sustainable development, environmental governance and natural resource management. In 2018, he was Special Adviser to the Secretary-General for the Sahel and supported ongoing efforts to advance the recalibration of the United Nations Integrated Strategy for the Sahel (UNISS) and the development of the UN Support Plan for the Sahel.

Prior to this position, from 2013 to 2018, he served as Assistant Secretary-General and Deputy Executive Director of the United Nations Environment Programme (UNEP), where he played a key role in shaping the organization's strategic vision and mandate, overseeing the development and implementation of the mid-term strategy and programme of work, and strengthening collaborations with Governments and other environmental governing bodies. Mr. Thiaw joined the United Nations in 2007 as Director of UNEP's Division for Environmental Policy Implementation.

Before joining the Organization, he was the Regional Director for West Africa, and later Acting Director General, of the International Union for Conservation of Nature (IUCN).

Mr. Thiaw started his career in Mauritania, his home country, where he served in the Ministry of Rural Development for 10 years. He holds an advanced degree in forestry and forest product techniques.



Danilo Türk

Former President of Slovenia and Chairman of the World Leadership Alliance - Club de Madrid

He graduated from the University of Ljubljana in 1975 with a degree in law and later obtained his PhD with a thesis on the principle of non-intervention in international law in 1982.

President Türk became Director of the Institute on International Law at the University of Ljubljana in 1983. Additionally, he was a member of the Sub-Commission on Prevention of Discrimination and Protection of Minorities, a UN body of independent experts. In that capacity he served, between 1986 and 1992, as the UN Special Rapporteur on the realization of Economic, Social and Cultural Rights. In 1990-1991, Türk took part in the drafting of the Constitution of Slovenia by preparing the draft chapter related to human rights and fundamental freedoms.

From 1992 to 2000, he became the first Slovene Permanent Representative to the UN in New York, and represented Slovenia on the UN Security Council in 1998 and 1999. In 2000, he was invited by Kofi Annan, then Secretary-General, to serve as UN Assistant Secretary-General for Political Affairs (2000-2005). In 2005, he returned to Slovenia as Vice-Dean of the Faculty of Law at the University of Ljubljana. He was elected as President in 2007 as an independent, being supported by several political parties. Dr. Türk chaired the Global High-Level Panel on Water and Peace between 2015 and 2016, which published the report "A Matter of Survival" (2017). In 2016, he was one of the candidates for the post of the Secretary-General of the UN.

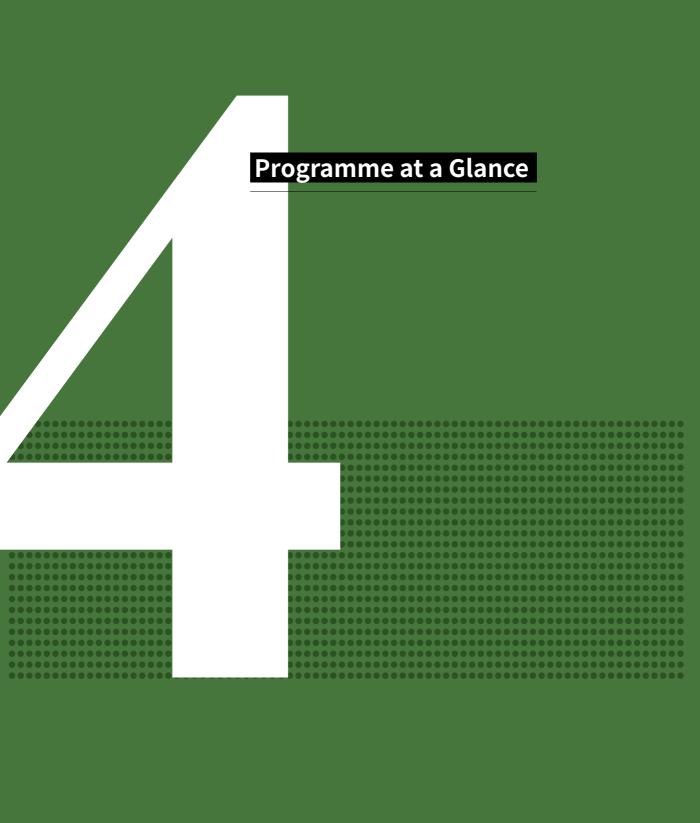
In 2019, he was elected as President of World Leadership Alliance - Club de Madrid, organization of more than 120 former Presidents and Prime Ministers. He continues to work within various international institutions, including United Nations as well as with non - governmental organizations and initiatives in the fields of multilateral cooperation and international law.



WANG Jian

Director of Zhejiang Lab and founder of Alibaba Cloud

Dr. Jian Wang was the chief technology officer of Alibaba Group, and is the founder of Alibaba Cloud, which is a major public cloud provider globally and ranks as first in Asia. He was also the chief architect of Apsara, the computing foundation of Alibaba Cloud, and took the lead in proposing the industrial model of using computing as a public service. In 2016, Dr. Wang pioneered and led the nonprofit City Brain initiative to develop a new digital infrastructure for sustainable "smart" cities as his personal effort and was the architect of Hangzhou City Brain. He founded the Yunqi Academy of Engineering, a private nonprofit research institute with a focus on scientific research for City Brain, and the Yunqi Science and Technology Innovation Foundation, a philanthropic private foundation that operates the 2050 museum which is open to public for free. The foundation envisions the future through technology innovation and organizes the 2050 event every year in April, promoting the vision of science and technology bringing people together. He is a member of the Chinese Academy of Engineering and lives in Hangzhou, China.



Programme at a Glance

September 6th	September 7th	September 8th
Opening Ceremony	Plenary Sessions	Plenary Sessions
	Break	
Plenary Sessions	Special Sessions Parallel Sessions	Special Sessions Parallel Sessions
	Lunch	
Special Sessions Parallel Sessions	Special Sessions Parallel Sessions	Special Sessions Parallel Sessions
	Break	
Parallel Sessions	Parallel Sessions	Closing Ceremony

Programme on September 6th, 2025

i i				Conference Room 1				
ime/site				AM				
				Opening Ceremony				
		(To	Ke pic: Digital Intelligen	Keynote Speech 1: Csaba Kőrösi (Topic: Digital Intelligence for Sustainability Transition to 2030 and Beyond)	Kőrösi Insition to 2030	and Beyond)		
9:00-12:20		(Topic:	Key Accelerating Sustain	Keynote Speech 2: GUO Huadong (Topic: Accelerating Sustainable Development Goals through Digital Technologies)	uadong Is through Digit	al Technologies)		
		(Topic: Big Data	Keynote a and Sustainable Dev Harnessing Digi	Keynote Speech 3: Quarraisha Abdool Karim (Topic: Big Data and Sustainable Development: TWAS Perspective on Global Scientific Co-operation Harnessing Digital Intelligence for a More Equitable World)	Abdool Karim pective on Globs ore Equitable W	al Scientific Co-corld)	operation	
				High Level Panel Discussion	ssion			
Timo/Sito				PM				
) 	Room 302	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E	Room 307	Room 310
13:30-15:00	A2: Harnessing Big Data for Sustainable Food Security	A4: Digital and Intelligent of Population and Health: A Driving Force for Sustainable Development Goals	C4: Policy Guidance and the Digital Intelligence Industry Promote Regional Sustainable Development	A7: Monitoring and Evaluation of Urban Sustainable Development Goals Based on Geospatial Big Data	A13: Marine Big Data and Al Supports Marine Sustainable Development Goals	S6: Digital Intelligence Driving Sustainable Development- Youth Action	S1: Special Session on DSP : Accelerating the Global SDGs with Digital Technologies	B11: Al for Early Warning Environment
15:00-15:30				Break				
15:30-17:00		A19: Digital Applications and Scenario Innovation for Goal Realization	C2: From Innovation to Impact: Scaling Digital and Data Solutions through South-South and Triangular Cooperation	A8: Integration of the Global Human Settlement Layer with SDGSat facilitating the implementation of the SDGs: A new milestone for GEO Human Planet partnership	A14: Big Earth Data in Support of SDG 15: Life on Land	S6: Digital Intelligence Driving Sustainable Development- Youth Action	A1: Empowering Crop Monitoring System by GeoAl and Big Data for Smallholder and Marginalized Communities	C6: Big Data Services for Sustainable Development Goals

Programme on September 7th, 2025

į				AM			
lime/site				Room 307			
9:00-9:25		(Topic:	Keynote Speech 4: Danilo Türk (Topic: From Aspirations to Decisions: Big Data for Sustainable Development)	Keynote Speech 4: Danilo Türk s to Decisions: Big Data for Sus	ürk Sustainable Dev	elopment)	
9:25-9:50		(Topic: Com	Keynote Speech 5: WANG Jian (Topic: Computing, AI, 3-Body Computing Constellation : GeoGPT for Earth Intelligence)	Keynote Speech 5: WANG Jian y Computing Constellation : Ge	Jian : GeoGPT for Eart	:h Intelligence)	
9:50-10:15		(Topic: Safeg	Keynote Speech 6: Ameenah Gurib-Fakim (Topic: Safeguarding Biodiversity and delivering on SDGs through Science and Big Data)	Keynote Speech 6: Ameenah Gurib-Fakim odiversity and delivering on SDGs througl	rib-Fakim is through Science	and Big Data)	
				Break			
Time/Site	Room 302	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E	Room 307
10:30-12:00	A9: Big Earth Data and Al Serving Sustainable Heritage	E4: Climate and Disasters (10:30-12:30)	B6: Digital Technology and Spatiotemporal Intelligence and Al for Disaster for Enhancing Urban Risk Reduction in Resilience and Promoting the Belt and Road High-Quality Development Region	C1: Big Earth Data and Al for Disaster Risk Reduction in the Belt and Road Region	B4: Data and AI for Disaster Risk Reduction	C8: Seminar on Promotion and Demonstration of Digital Technologies for Sustainable Development	S2: Global-Scale Sustainable Development Scientific Monitoring Report (2025): A Decade of Progress through the Lens of Big Earth Data
12:00-13:30				PM			
Time/Site	Room 302	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E	Room 307
13:30-15:00	A10: Improving Monitoring for Better Integrated Climate and Biodiversity Approaches, Using Environmental and Earth Observation	E3: Global Urban Watch (13:00-15:00)	C5: Big Data for Disaster Risk Reduction along the Belt and Road: Challenges and Innovations	A5: Digital Watersheds for Sustainable Development	A15: Remote Sensing for Conservation and Biodiversity	S3: Accelerating SDGs with AI: The Role of Large Models and AI Agents	S5: International Collaboration on Water and Disasters: Research, Education and Pathways to Sustainable Development
15:00-15:30				Break			
15:30-17:00	A10: Improving Monitoring for Better Integrated Climate and Biodiversity Approaches, Using Environmental and Earth Observation	E2: Inland Water Dynamics (15:30-17:50)	A11: Sustainable Development of the Earth's Cold Regions under a Warming Scenario	A5: Digital Watersheds for Sustainable Development	A15: Remote Sensing for Conservation and Biodiversity	S3: Accelerating SDGs with AI: The Role of Large Models and AI Agents	S5: International Collaboration on Water and Disasters: Research, Education and Pathways to Sustainable Development

Programme on September 8th, 2025

					AM			
ime/site					Room 307			
9:00-9:25			(Торіс	Keynote Speech 7: Ibrahim Thiaw (Topic: Land Degradation, Drought, and the Path Forward)	Keynote Speech 7: Ibrahim Thiaw Degradation, Drought, and the Pa	hiaw he Path Forward)		
9:25-9:50				Keynote Spee (Topic: Assessing	Keynote Speech 8: Johannes Cullmann (Topic: Assessing Sustainable Development)	ullmann elopment)		
					Break			
Time/Site	Room 302	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E	Room 307	Room 310
10:10-11:40	B10: Al for Sustainable Development: Data, Models and Insights	A20: Monitoring, Application, and Service of Sustainable Development Goals	E1: AgriFood System (10:10-12:04)	A3: Smart Agriculture: Innovation and Practices of Agricultural Robot	B5: Al in Land Resources Utility and Management with High Efficiency	E7: Integrated Evaluations and Interactions (10:10-12:00)	S4: Big Earth Data Facilitating SDGs for SIDS and African Countries Challenges and Opportunities	E5: Ecosystem and Energy (10:10-12:14)
11:40-13:30					PM			
Time/Site	Room 302	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E	Room 307	Room 310
13:30-15:00	D1: Reflections on Sustainable Development Goals to co- creating the Post-2030 Agenda	B9: Quantum Intelligent Computing for Sustainable Development Goals	B1: Pixels to Policy: Harnessing Earth-Observation and Al for Impact-Driven Development	A18: Earth Intelligence in Action: Advancing the GEO Wildfire- Health Nexus from Monitoring to Mitigation	A12: Big Ocean Data Promotes Sustainable Development	A6: 10 Years of SDG 11 Spatial Monitoring: What Have We Learnt and What Opportunities Exist for Big Data and Geospatial Information to Scale Up Efforts	S4: Big Earth Data Facilitating SDGs for SIDS and African Countries Challenges and Opportunities	B8: AI Models and Big Data Construction and Applications for Flood Control and Disaster Reduction
15:00-15:30					Break			
15:30-17:00				Closing C	Closing Ceremony (Room 307)	(7		

	Session	Room	Time
S1	Special Session on DSP: Accelerating the Global SDGs with Digital Technologies	307	13:30-15:00, 6th September
S2	Global-Scale Sustainable Development Scientific Monitoring Report (2025): A Decade of Progress through the Lens of Big Earth Data	307	10:30-12:00, 7th September
S3	Accelerating SDGs with AI: The Role of Large Models and AI Agents	305E	13:30-17:00, 7th September
S4	Big Earth Data Facilitating SDGs for SIDS and African Countries: Challenges and Opportunities	307	10:10-12:30, 8th September
S 5	International Collaboration on Water and Disasters: Research, Education and Pathways to Sustainable Development	307	13:30-17:00, 7th September
S 6	Digital Intelligence Driving Sustainable Development— Youth Action	305E	13:30-17:40, 6th September
A 1	Empowering Crop Monitoring System by GeoAl and Big Data for Smallholder and Marginalized Communities	307	15:30-17:00, 6th September
A2	Harnessing Big Data for Sustainable Food Security	302	13:30-15:00, 6th September
А3	Smart Agriculture: Innovation and Practices of Agricultural Robot	305C	10:10-11:40, 8th September
A4	Digital and Intelligent of Population and Health: A Driving Force for Sustainable Development Goals	305A	13:30-15:00, 6th September
A 5	Digital Watersheds for Sustainable Development	305C	13:30-17:00, 7th September
A 6	10 Years of SDG 11 Spatial Monitoring: What Have We Learnt and What Opportunities Exist for Big Data and Geospatial Information to Scale Up Efforts	305E	13:30-15:00, 8th September
A7	Monitoring and Evaluation of Urban Sustainable Development Goals Based on Geospatial Big Data	305C	13:30-15:00, 6th September
A8	Integration of the Global Human Settlement Layer with SDGSat facilitating the implementation of the SDGs: A new milestone for GEO Human Planet partnership	305C	15:30-17:00, 6th September
A9	Big Earth Data and Al Serving Sustainable Heritage	302	10:30-12:00, 7th September
A10	Improving Monitoring for Better Integrated Climate and Biodiversity Approaches, Using Environmental and Earth Observation	302	13:30-17:00, 7th September
A11	Sustainable Development of the Earth's Cold Regions under a Warming Scenario	305B	15:30-17:00, 7th September
A12	Big Ocean Data Promotes Sustainable Development	305D	13:30-15:00, 8th September

	Session	Room	Time
A13	Marine Big Data and AI Supports Marine Sustainable Development Goals	305D	13:30-15:00, 6th September
A14	Big Earth Data in Support of SDG 15: Life on Land	305D	15:30-17:00, 6th September
A15	Remote Sensing for Conservation and Biodiversity	305D	13:30-17:00, 7th September
A18	Earth Intelligence in Action: Advancing the GEO Wildfire-Health Nexus from Monitoring to Mitigation	305C	13:30-15:00, 8th September
A19	Digital Applications and Scenario Innovation for Goal Realization	305A	15:30-17:00, 6th September
A20	Monitoring, Application, and Service of Sustainable Development Goals	305A	10:10-11:40, 8th September
B1	Pixels to Policy: Harnessing Earth-Observation and AI for Impact-Driven Development	305B	13:30-15:00, 8th September
B4	Data and AI for Disaster Risk Reduction	305D	10:30-12:00, 7th September
В5	AI in Land Resources Utility and Management with High Efficiency	305D	10:10-11:40, 8th September
В6	Digital Technology and Spatiotemporal Intelligence for Enhancing Urban Resilience and Promoting High-Quality Development	305B	10:30-12:00, 7th September
B8	Al Models and Big Data Construction and Applications for Flood Control and Disaster Reduction	310	13:30-15:00, 8th September
В9	Quantum Intelligent Computing for Sustainable Development Goals	305A	13:30-15:00, 8th September
B10	Al for Sustainable Development: Data, Models and Insights	302	10:10-11:40, 8th September
B11	Al for Early Warning Environment	310	13:30-15:00, 6th September
C 1	Big Earth Data and Al for Disaster Risk Reduction in the Belt and Road Region	305C	10:30-12:00, 7th September
C2	From Innovation to Impact: Scaling Digital and Data Solutions through South-South and Triangular Cooperation	305B	15:30-17:00, 6th September
C4	Policy Guidance and the Digital Intelligence Industry Promote Regional Sustainable Development	305B	13:30-15:00, 6th September
C 5	Big Data for Disaster Risk Reduction along the Belt and Road: Challenges and Innovations	305B	13:30-15:00, 7th September
C6	Big Data Services for Sustainable Development Goals	310	15:30-17:00, 6th September

	Session	Room	Time
C8	Seminar on Promotion and Demonstration of Digital Technologies for Sustainable Development	305E	10:30-12:00, 7th September
D1	Reflections on Sustainable Development Goals to co- creating the Post-2030 Agenda	302	13:30-15:00, 8th September
E1	AgriFood System	305B	10:10-12:04, 8th September
E2	Inland Water Dynamics	305A	15:30-17:50, 7th September
E 3	Global Urban Watch	305A	13:00-15:00, 7th September
E4	Climate and Disasters	305A	10:30-12:30, 7th September
E 5	Ecosystem and Energy	310	10:10-12:14, 8th September
E7	Integrated Evaluations and Interactions	305E	10:10-12:00, 8th September

Session Details

Session S1

Special Session on DSP: Accelerating the Global SDGs with Digital Technologies

Time

13:30-15:00, 6th September

Room: 307

Co-Chair

Csaba Kőrösi (President of the 77th United Nations General Assembly)

The 2025 Sustainable Development Goals (SDGs) Report underscores the urgent need to accelerate progress toward the SDGs, with many targets off track and significant gaps in data availability. The implementation of the SDGs faces profound scientific and policy challenges, including significant data gaps, inconsistent monitoring methodologies, and a lack of globally comparable indicators, particularly in developing regions. The existing SDG framework is increasingly seen as complex and structurally insufficient, with nearly half of the indicators lacking time-series data, thereby hindering comprehensive and dynamic assessment. Deep scientific understanding of the interlinkages within socio-economic-environmental systems remains limited, impeding the ability to model, predict, and effectively steer sustainability pathways.

In this context, the Digital Sustainable Development Goals Programme (DSP), endorsed by UNESCO in February 2025, represents a global scientific effort designed to harness digital innovations and multi-stakeholder collaborations to advance the implementation of the SDGs. It aligns with broader trends in global scientific governance and international cooperation, responds to the post-2030 sustainability agenda to accelerate SDG implementation worldwide.

This DSP special session, *Accelerating the Global SDGs with Digital Technologies*, is open for discussion with the aims on soliciting the last discussion from the experts of the scientific and policy communities. The session will feature invited presentations followed by an open and free Q&A discussion, providing a platform for in-depth dialogue among global researchers and practitioners.

The remarks and invited speeches are from,

Csaba Kőrösi (President of the 77th United Nations General Assembly)

GUO Huadong (Director General, International Research Center of Big Data for Sustainable Development Goals (CBAS))

Xavier Estico (Founder of the Seychelles Centre for Innovation, and Sustainable Development; SG's 10 Member Group, Seychelles)

CHEN Deliang (Tsinghua University, China)

Simon Redfern (Dean, Nanyang Technological University, Singapore)

Johannes Cullmann (Science Advisory to president of the 77th UNGA, Federal Institute of Hydrology, Germany)

We cordially welcome all attendees to join this session!

Global-Scale Sustainable Development Scientific Monitoring Session S2 Report (2025): A Decade of Progress through the Lens of Big Earth Data

Time 10:30-12:00, 7th September Room: 307

LIU Jie (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Gretchen Kalonji (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Event 1: Opening Remark (5 minutes)

Moderator: LIU Jie

Co-Chairs

GUO Huadong (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Event 2: Keynote Presentations (30 minutes)

Moderator: LIU Jie

Overview of the 2025 Global SDG Monitoring Report- Framework/ Methodology/Main Findings (30 minutes)

CHEN Yu (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Event 3: Panel Discussion (60 minutes)

Moderator: Gretchen Kalonji

Topics:

- Promote the upcoming Global-scale Sustainable Development Scientific Monitoring Report
- Discuss the main findings, future themes and content of the report series
- Provide suggestions for the future organization of the report

Panel Speakers:

- **Csaba KŐRÖSI** (President of the 77th UN General Assembly, Strategic Director of the Blue Planet Climate Protection Foundation)
- **GUO Huadong** (Director General of the International Research Center of Big Data for Sustainable Development Goals (CBAS))

- **Johannes Cullmann** (Scientific Advisor to the 77th President of the UN General Assembly)
- **Ibrahim Thiaw** (Under-Secretary-General and Executive Secretary of the UNCCD)
- **Gretchen Kalonji** (Special Advisor, International Research Center of Big Data for Sustainable Development Goals (CBAS))
- Prajal Pradhan (University of Groningen)

Session S3	Accelerating SDGs with AI: The Role of Large Models and AI Agents		
Time	13:30-17:00, 7th September Room: 305E		
Co-Chairs	LI Jianhui (International Research Center of Big Data for Sustainable Development Goals (CBAS); Nanjing University, China)		
	Francis P. Crawley (CODATA International Data Poli	Francis P. Crawley (CODATA International Data Policy Committee (IDPC))	
	Presentations (20min+5min Q&A for each	speaker)	
	Large Multimodal Models: Research Advances a SHAN Caifeng (Nanjing University)	nd Applications	
	Artificial Intelligence and Multimodal Remote Sensing for Urban Monitoring ZHANG Hongshen (Hongkong University)		
Al for genomic solidarity: embedding large language models and visitation agents into advancing precision health for the SDGs Francis P. Crawley (CODATA International Data Policy Committee)		h for the SDGs	
	Generative Multi-agents based on LLMs WU Chao (Zhejiang University)		
SDGs Deep Research Agent PEI Changhua (CNIC,CAS)			
	Domain Agent Training: Challenges and Solutions GAO Jingyang (Alibaba Qwen) European coordinated efforts for access and analysis of environmedata: the ENVRI-Hub NEXT approach Tiziana Ferrari (EGI Foundation)		
	Exploring a New Paradigm for an Al-Native SDG Analysis Platform LIU Jie (Institute of Software, CAS)	Big Data Intelligent	
A system-dynamic-intelligent governance framework for fut sustainable development SU Jianbin (Nanjing Normal University)		ework for future	
	Introduction and Demonstration of agentic AI sy LI Jianhui (CBAS, Nanjing University)	ystem for SDG	

Session S4 Big Earth Data Facilitating SDGs for SIDS and African Countries: Challenges and Opportunities

Time 10:10-12:30, 8th September Room: 307

LIU Wei (Division for Sustainable Development, UNDESA)

Co-ChairsWANG Lei (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Opening Remarks (10:10-10:25)

GUO Huadong (CBAS)

LIU Wei (UNDESA)

CHEN Rui (China Centre for International Science and Technology Exchange)

Event 1: Keynotes (10:25-11:25)

STI for Climate Resilience in SIDS and African Countries LIU Wei (Division for Sustainable Development, UNDEA)

Bridging the Digital Divide: The Critical Role of Engineering in Driving Digital Transformation in Africa and Small Island Developing States (SIDS)

GONG Ke (Nankai University; Former President of WFEO)

Capacity Development for Strategic Foresight in SIDS and African Countries

Azeema Adam (Division for Public Institutions and Digital Government, UNDESA)

Big Earth Data for Disaster Risk Reduction in SIDS and African Countries CHEN Fang (CBAS, China)

Event 2: Panel Discussion (11:25-12:05)

Challenges and Opportunities with Big Earth Data in Facilitating SDGs in African and SIDS Countries

(Moderator: Gretchen Kalonji)

Panel Speakers:

Ms. Azeema Adam (UNDESA);

Declan Kirrane (ISC Intelligence in Science);

Felix Xavier Estico (Seychelles Centre for Innovation and Sustainable Development);

LIU Wei (Division for Sustainable Development, UNDEA);

Ameenah Gurib-Fakim (Former President of Mauritius);

Marcelin Sanou (Panafrican Agency of the Great Green Wall);

Ibrahim Thiaw (Former Under-Secretary-General and former Executive Secretary of the UNCCD)

Event 3: Outcome statement Capacity Building Workshop for Small Island Developing States (12:05-12:20)

Event 4: Certificate Award & Group photo (12:20-12:30)

Session S5

International Collaboration on Water and Disasters: Research, Education and Pathways to Sustainable Development

Time

13:30-17:00, 7th September Room: 307

Gretchen Kalonji (Special Advisor and Professor, International Research Center of Big Data for Sustainable Development Goals (CBAS))

Co-Chairs

Kenzo Hiroki (Graduate Research Institute of Policy Studies, Tokyo; Coordinator, High-Level Experts and Leaders Panel on Water and Disasters)

CHEN Fang (Professor and Deputy Director General, CBAS)

Opening remarks

Introductory remarks by Co-Chairs (6 minutes)

Welcome remarks (5 minutes)

Session 1: Creative approaches to research on water, disasters and sustainable development Chair: Chen Fang

- **Prof. Akiyuki Kawasaki** (Institute for Future Initiatives and Department of Civil Engineering, University of Tokyo)
- Prof. Muhammad Farid (Bandung Institute of Technology)
- Prof. Tibor Biro (Ludovica University of Public Service, Budapest)
- **Prof. Simon Redfern** (Dean of Sciences, Nanyang Technological University, former Head of Earth Sciences, Cambridge University)
- Prof. Madhumitha Chatterji (Director, ABBA Business School, Bangalore)
- Dr. Johannes Cullmann (Federal Institute of Hydrology, Germany)
- Professor Toshio Koike (Executive Director, International Center for Water Hazard and Risk Management under the auspices of UNESCO (ICHARM))

Tea break: 15:00 - 15:30

Session 2: Strengthening partnerships on water, disasters and sustainable development

Chair: Kenzo Hiroki

- **Prof. Kenzo Hiroki** (High-Level Experts and Leaders Panel on Water and Disasters)
- **Prof. Yang Saini** (Executive Director, Integrated Research on Disaster Risk program (IRDR))

- **Prof. Hirokazu Tatano** (Global Alliance of Disaster Research Institute (GADRI))
- Mr. Soichiro Yasukawa (Chief of Disaster Risk Management, UNESCO Paris (on line))
- **Prof. Cui Peng** (Institute of Mountain Hazards and the Environment, Chinese Academy of Sciences, Director, ANSO-DRR)
- Mr. Ari Herrera (Past President, Pan American Federation of Engineering Organizations (UPADI), Executive Council, World Federation of Engineering Organizations (WFEO))
- **Prof. András Szöllősi-Nagy** (UNESCO Chair on Water Conflict Management, Ludovica University of Public Service, Budapest)

Session 3: High-Level Panel Discussion on Paths Forward. Moderator: Gretchen Kalonji

- **Professor Danilo Turk** (Former President of Slovenia, President of the Club de Madrid)
- **HE Csaba Korosi** (President of the 77th Session of the UN General Assembly; Blue Planet Foundation)
- Mr. Ibrahim Thiaw (Under-Secretary-General and Executive Secretary of the United Nations Convention to Combat Desertification (UNCCD))
- Dr. Ameenah Gurib Fakim (Former President of Mauritius)
- **Prof. GONG Ke** (Former President of the World Federation of Engineering Organizations (WFEO), Head of the WFEO Strategic Task Force on Engineering Capacity Building in Africa)

Closing remarks



Session S6 Digital Intelligence Driving Sustainable Development —Youth Action

Time 13:30-17:40, 6th September Room: 305E

CHEN Fang (International Research Center of Big Data for Sustainable Development Goals (CBAS); TWAS Young Affiliates Network)

CHEN Min (Nanjing Normal University, China; ISDE Young Scientists Innovation Network)

REN Huazhong (Peking University, China; CNISDE Young Scientists Committee)

Prajal Pradhan (University of Groningen, Netherlands)

Opening Remarks (13:30-13:40)

Event 1: Keynote Presentations (13:40-14:20)

Responses of terrestrial carbon cycle to climate change over the Tibetan Plateau

WANG Tao (Institute of Tibetan Plateau Research, Chinese Academy of Sciences, China)

Leveraging Artificial Intelligence for sustainable transformation beyond accelerating the Sustainable Development Goals (AI4SDGs)

Prajal Pradham (University of Groningen, Netherlands)

Event 2: Panel Discussion (14:20-15:00)

Topics:

Co-Chairs

How can digital technologies advance SDGs?

Moderator: DONG Jinwei

Panel Speakers:

Basanta Raj Adhikari (Tribhuvan University, Nepal)

CAO Min (Nanjing Normal University, China)

LI Dongfeng (Peking University, China)

Nurfashareena Muhamad (Universiti Kebangsaan Malaysia, Malaysia)

Prajal Pradham (University of Groningen, Netherlands)

WANG Tao (Institute of Tibetan Plateau Research, Chinese Academy of Sciences, China)

Event 3: Keynote Presentations (15:30-16:50)

Remote Sensing Analyses of Agricultural Land Systems in the Big Data and Large-Scale Modeling Era

DONG Jinwei (Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, China)

Big river data supports hydropower sustainability and flood resilience in High Mountain Asia

LI Dongfeng (Peking University, China)

Advancing Multifaceted Urban Environmental Monitoring with Geospatial Analytics

CHEN Bin (The University of Hong Kong, China)

High-resolution mapping of poverty and its long-term changes across low- and middle-income countries

ZHANG Liqiang (Beijing Normal University, China)

Event 4: Panel Discussion (16:50-17:30)

Topics:

How can digital technologies advance SDGs?

Moderator: Prajal Pradham

Panel Speakers:

CHEN Bin (The University of Hong Kong, China)

DONG Jinwei (Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, China)

Zainun Binti Mustafa (Universiti Pendidikan Sultan Idris, Malaysia)

ZENG Yelu (China Agricultural University, China)

ZHANG Xiang (China University of Geosciences, China)

Closing Remarks (17:30-17:40)

Session A1	Empowering Crop Monitoring System by GeoAl and Big Data for Smallholder and Marginalized Communities		
Time	15:30-17:00, 6th September	Room: 307	
	Livia Peiser (Land and Water Division, FAO)		
Co-Chairs	ZUO Lijun (International Research Center of Development Goals (CBAS))	f Big Data for Sustainable	
	Opening, LI Lifeng (Director, NSL, FAO) and scene setting by chairs		
	Review of recent trends in the application of innovative technologies for monitoring smallholder agriculture		
	Mariana Belgiu (University of Twente, Netherlands)		
	Leveraging Remote Sensing and GeoAl for Crop and Water Monitoring in Smallholder Farming Systems in Mozambique JOSE DO ROSARIO BOFANA (Catholic University of Mozambique and FAO)		
	Mapping 10-m monoculture and intercropped maize in smallholder area of Kenya by integrating crop phenology and GeoAl YANG Chen (Aerospace Information Research Institute, Chinese Academy of Sciences, China) A novel hierarchical semantic boundary-guided multi-task network for agriculture parcel delineation		
	ZHANG Miao (Aerospace Information Research Institute, Chinese Academy of Sciences, China)		
	Improving rice production capacity to ensure food security: a farm survey-based perspective		
	SHEN Yuan (Huazhong Agriculture University, China)		
	Global crop growth and pest monitoring by remote sensing		

Smart Governance and Intelligent Farmland Management

KONG Xiangbin (South China Agricultural University, China)

Precision Crop Mapping in Complex Agricultural Landscapes Using Multi-Source Remote Sensing and Deep Learning

HUANG Wenjiang (Aerospace Information Research Institute, Chinese

LIU Jianhong (Northwest University, China)

Academy of Sciences, China)

Flash talk: Precision Crop Mapping in Complex Agricultural Landscapes Using Multi-Source Remote Sensing and Deep Learning

Flash talk: Smart Governance and Intelligent Farmland Management

QA to be adapted to final agenda

Panel Discussion

Topics:

- 1)Identification of current technological and procedural gaps that limit application of big data for smallholder farming
- 2)Potential innovations and future prospects on leveraging GeoAl and Big Data for smallholder farming
- 3) Working mechanism of Group on GeoAl and Big Data for smallholder agriculture

Panel Speakers:

- 1) Sven Gilliams (GEOGLAM)
- 2) JIA Yan (World Food Programme)
- 3) **Takaaki Masaki** (Pamela Lapitan etc. Asian Development Bank)
- 4) Keith Shepherd (iSDA)
- 5) **JIA Li** (AIRCAS)
- 6) **MENG Qingfeng** (Chinese Agriculture University)

Session A2	Harnessing Big Data for Sustainable Food Security		
Time	13:30-15:00, 6th September	Room: 302	
Co Chaine	Muhammad Waqar Yasin (Land Information and Management System Centre of Excellence (LIMS-CoE), Pakistan)		
Co-Chairs	Muhammad Abu Bakar Zia (Land Information and Management system (LIMS), Pakistan)		
	Study on Arable Land Suitability Evaluation in Black Soil Regions under Ground Substrate Constraints		
	WANG Minhua (Center for Geophysical Survey, China Geological Survey, China) Integrating AI with GWAS: A Pathway to Enhanced and Sustainable Food Security		
Muhammad Abu Bakar Zia (Land Information and Management system) (LIMS), Pakistan)		tion and Management system	
	Climate Resilient Agriculture and Role O	f Big Data	
	Muhammad Waqar Yasin (Land Information and Management System Centre of Excellence (LIMS-CoE), Pakistan)		
High-Precision Monitoring of Spartina alterniflora by Integrating Models Source Remote Sensing Data and Deep Learning Models CHEN Gang (Satellite Environmental Application Center, Ministry of Ecology and Environment, China)		, ,	
		cation Center, Ministry of	
	Urbanization exacerbates the risk of extra security in sub-Saharan Africa	reme drought impacting food	

LIU Jing (Capital Normal University, China)

Session A3	Smart Agriculture: Innovation and Practices of Agricultural Robot	
Time	10:10-11:40, 8th September Room: 305C	
Co-Chairs	HE Yong (Zhejiang University, China)	
Co-Chairs	GUO Jie (Hainan University, China)	
	Exploration and Trend of agricultural robots for fruit and Vegetable FENG Qingchun (Beijing Academy of Agriculture and Forestry Sciences, China)	
Research on low-carbon transformation path of China's rice in based on climate-smart big data model JIANG Qianjing (Zhejiang University, China)		
	Estimation and Variation of Length of Growing Season Using Satellite Based Derived Indices in the Selected Districts of Punjab, Pakistan Daniyal Afzaal Abbasi (Institute of Geo-information & Earth Observation, PMAS Arid Agriculture University Rawalpindi, 46300, Pakistan)	
	Spatially explicit estimation of high-resolution irrigation water use across China using Earth observation data and deep learning BO Yong (Aerospace Information Research Institute of the Chinese Academy of Sciences, China)	
	Remote Sensing-Based Estimation of Irrigation Water Use Using Transfer Learning Methods	

LIU Yizhuo (Aerospace Information Research Institute of the Chinese

Academy of Sciences, China)

Session A4	Digital and Intelligent of Population and Health: A Driving Force for Sustainable Development Goals		
Time 13:30-15:00, 6th September Room: 305A			
	HE Dan (China Population and Development Research Center)	_	
Co-Chairs	ZHANG Xuying (China Population and Development Research Center)		
	Monitoring and Forecasting Population and Health Trends in Shenzhen Based on an Intelligent Agent Model	_	
Zhao Chengwen (Shenzhen Health Development Research and D Management Center, China)			
	'Combine Big-data with AI', Promoting Social Governance and Industrial Development	_	
	Yan Jia (VP of Smart Steps Digital Technology Company, China)		
	Advancing Decision-Making and Collective Welfare in Structured Populations Through Artificial Intelligence	_	
	Feng Xue (Beijing Institute for General Artificial Intelligence, China)		
	Artificial Intelligence in Dementia Prevention and Care in elder population: An Exploration of Practical Applications He Pengfei (China Population and Development Research Center, China)		
	China Population Data Integration Application Wang Yingan (China Population and Development Research Center, China)	_	

Session A5 Digital Watersheds for Sustainable Development

Time 13:30-17:00, 7th September Room: 305C

Co-Chairs XIA Jun (Wuhan University, China)

CHEN Xi (Zhejiang University of Technology, China)

Aquatic biodiversity loss and management in the Yangtze River Basin

WANG Haijun (Yunnan Key Laboratory of Ecological Protection and Resource Utilization of River-lake Networks, Institute for Ecological Research and Pollution Control of Plateau Lakes, Yunnan University, China)

A High-Spatial-Accuracy Global River Dataset via Multi-Source Vector Data Fusion

LIU Yesen (China Institute of Water Resources and HydroPower Research, China)

Parameter optimization method for cross basin hydrological land surface model driven by large sample simulator

TANG Guoqiang (Wuhan University, China)

Unravelling and Improving the Potential of Global Discharge Reanalysis Dataset in Streamflow Estimation in Ungauged Basins

ZHOU Li (Sichuan University, China)

Mapping of Potential Storages and Rainwater Harvesting Sites in Arid Region of Indus Basin using Analytical Hierarchy Technique

Muhammad Amin (Institute of Geo-information & Earth Observation, PMAS Arid Agriculture University Rawalpindi, Pakistan)

Glacial Lake Outburst Flood Mapping and Risk Assessment using Combined Approaches of Satellite Remote Sensing, GIS and Dam Break Modelling

Tabraiz Ahmad (Institute of Geo-information and Earth Observation, PMAS Arid Agriculture University Rawalpindi, Pakistan)

A bibliometric analysis of water pollution with nutrients and water quality

Shobegim Shoergashova (Xinjiang Institute of Ecology and Geography, CAS, China)



Multi-Scenario Flood Susceptibility Projections in the Eastern Hindu Kush: Integrating Machine Learning, CMIP6, and Land Use Change kashif Ullah (Zhejiang University of Technology, China)

Hydrological implications of pervasive permafrost thaw across the Tibetan Plateau

WANG Taihua (Tsinghua University, China)

Revealing the long-term catchment-scale carbon budget dynamics on the permafrost-dominated eastern Tibetan Plateau

LI Leifang (Tsinghua University, China)

Sustainable Development of River Network Connectivity and Function Integrating the River Ecological Sensitivity Index

WU Fan (Zhengzhou University, China)

Large Spatial Scale and High Temporal Resolution Snow Parameter Retrieval from Sentinel-3 OLCI

LU Keru (Zhejiang University of Technology, China)

Session A6 10 Years of SDG 11 Spatial Monitoring: What Have We Learnt and What Opportunities Exist for Big Data and Geospatial Information to Scale Up Efforts Time 13:30-15:00, 8th September Room: 305E Robert Ndugwa (Chief, Data and Analytics Section, UN-Habitat, Kenya) Caroline Kabaira (Senior Research Specialist, APHRC Kenya) Michele Melchiorri (Directorate for Societal Resilience and Security, European Commission Joint Research Centre (JRC), Italy) Mapping humanity at scale: A decade of GEO Human planet innovations and next directions Michele Melchiorri (European Commission Joint Research Centre (JRC),

SDG 11.3.1 trackers: opportunities for scale up and global coverage BAN Yifang (Director, Division of Geoinformatics, KTH Royal Institute of Technology, Greater Stockholm Metropolitan Area)

Assessing Urban Sustainability using SDG11.3.1 Land Use Efficiency indicator

SUN Zhongxu (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Community-based approaches for tracking slums and informal settlements

Caroline Kabaira (Senior Research Specialist, APHRC Kenya)

Multi-source data fusions technologies based on landsenses ecology: contributions to SDG 11

DONG Rencai (Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, China)

Assessment of grey-green spatial allocation relationship measurements and changes in the proportion of population served by green open spaces in China's provincial capital cities in 10 years of SDG 11

WANG Xi (Lanzhou University, China)

Italy)

Bridging the gap between Artificial Intelligence and urban informal communities with participatory analytics

João Porto de Albuquerque (Director of the Urban Big Data Centre, Glasgow, UK)

Panel Discussion

Topics:

- 1) What are the key lessons learned from a decade of SDG 11 spatial monitoring in your work feild, and how can these insights guide the next phase of urban sustainability efforts?
- 2) How can big data, geospatial technologies, and multi-source data fusion be applied more effectively to map housing conditions, informal settlements, and urban change at scale?
- 3) What strategies can strengthen community engagement and international collaboration to scale up spatial monitoring and translate data into impactful urban policies?

Panel Speakers:

Dennis Mwaniki (UN-Habitat, Kenya)

Caroline Kabaira (APHRC Kenya)

Michele Melchiorri (European Commission Joint Research Centre, Italy)

Session A7	Monitoring and Evaluation of Urban Sustainable Development Goals Based on Geospatial Big Data		
Time	13:30-15:00, 6th September Room: 305C		
	LU Linlin (International Research Center of Big Data for Sustainable Development Goals, China)		
Co-Chairs	XUE Yong (Nanjing University of Information Science and Technology, China)		
	Gerrit de Leeuw (Royal Netherlands Meteorological Institute, Netherlands)		
	CAO Shisong (Beijing University of Civil Engineering and Architecture, China)		
	I.M.P.A.T.T.O. – Spatiotemporal GeoBigData and Predictive Models for Urban Planning and policies support in the Municipality of Udine Salvatore Amaduzzi (University of Udine, Italy)		
	Time-Series InSAR Analysis of Interseismic Deformation along the Xianshuihe Fault using Sentinel-1 Data (2021–2024) YAO Xianliang (Sichuan Earthquake Administration, China)		
	Surface urban heat island variations under the 3-decadal urban expansion in China: patterns and driving factors YANG Haibo (Zhengzhou University, China)		
	A Multi-Dimensional Assessment of the Summer Cooling Benefits of Green Roofs: A Case Study of the Central Urban Area of Xi' an, China		
	LIU Jianhong (Northwest University, China)		
	Federated Machine Learning-Based Urban Attributes Mapping using Multi-Source Urban Data		
	YU Junxian (Shenzhen University, China)		
	Domain Transferring Enhanced Foundation Modal for Landslide Detection from High-Resolution Remote Sensing Images		
	LI Kaiyuan (China University of Mining and Technology, China)		

Integration of the Global Human Settlement Layer with **Session A8** SDGSat facilitating the implementation of the SDGs: A new milestone for GEO Human Planet partnership Time 15:30-17:00, 6th September **Room: 305C Christina Corbane** (Directorate for Societal Resilience and Security, European Commission Joint Research Centre (JRC), Italy) Michele Melchiorri (Directorate for Societal Resilience and Security, European Commission Joint Research Centre (JRC), Italy) Co-Chairs Martino Pesaresi (Directorate for Societal Resilience and Security, European Commission Joint Research Centre (JRC), Italy) **LU Linlin** (International Research Center of Big Data for Sustainable Development Goals (CBAS)) Illuminating Inequality: Fusing Night-Time Lights, Built-Up Density and **Population Grids to Map Global Deprivation Hot-Spots** Michele Melchiorri (European Commission Joint Research Centre (JRC), Italy) Spatial Monitoring Methods for United Nations' Sustainable **Development Goals CAO Shisong** (Beijing University of Civil Engineering and Architecture, China) Synergising sustainable development: Spatial-temporal dynamics of regional cooperation on the achievement of SDGs in Chinese urban agglomerations **LIU Yu** (Central China Normal University, China) Mapping Megafire Carbon Fluxes to SDG 13.2.1: A Remote Sensing Framework for California's Climate Action Tracking **HAN Liying** (China University of Mining and Technology, China) Land use carbon emission projections in shared socioeconomic and representative concentration pathways: Relationship with

JIAO Longzhen (International Research Center of Big Data for Sustainable

urbanization in Chinese megacities

Development Goals (CBAS))

Session A9	Big Earth Data and AI Serving Sustainable Heritage		
Time	10:30-12:00, 7th September Room: 302		
	LUO Lei (International Centre on Space Technologies for Natural and Cultural Heritage under the auspices of UNESCO (HIST))		
Co-Chairs	WANG Xinyuan (International Centre on Space Technologies for Natural and Cultural Heritage under the auspices of UNESCO (HIST))		
	TARIQ Shahina (Land Information and Management System Centre of Excellence (LIMS-CoE))		
	Preserving the Past, Preparing the Future: AI Partnerships for Climate- Resilient Cultural Heritage and SDGs (invited)		
	Shahina Tariq (Land Information and Management System Centre of Excellence, Pakistan)		
	Big Earth Data and AI: Repowering Policy and Innovation through Space Technologies (invited)		
	LASAPONARA Rosa (CNR-IMAA, Italy) The use of machine learning and satellite imagery to detect roman fortified sites: the case study of blad talh (Tunisia section)		
BACHAGHA Nabil (University of Leeds, UK)			
	A Comprehensive Assessment of Urban Sprawl Impacts on World Cultural Heritage: A case Study of Taxila		
	Najam us Saqib Zaheer Butt (International Max Planck Research School for Global Biogeochemical Cycles, Germany)		
	Archaeological Prediction Using explainable AI Optimized with Negative Sample Strategy: A Case Study of the Kushan Period in Surkhandarya, Uzbekistan		
	YANG Jia (Beijing University of Civil Engineering and Architecture, China)		
	A Qanat Detection Method Integrating Deep Learning with Post- Processing Optimization: A Case Study of the Persian Qanats World Heritage Site		
	FU Xingjian (Institute of Disaster Prevention, China)		
	Deep Learning-Based Detection of Stone-constructed Burial Mounds in the Western Tianshan Steppe		
	TU Ran (International Research Center of Big Data for Sustainable		

Development Goals (CBAS))

Session A10

Improving Monitoring for Better Integrated Climate and Biodiversity Approaches, Using Environmental and Earth Observation

Time

13:30-17:00, 7th September

Room: 302

LIU Yalan (Aerospace Information Research Institute, Chinese Academy of Sciences, China)

Co-Chairs

MEI Linlu (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Bob O'Hara (Department of Mathematical Sciences, Norwegian University of Science and Technology, Norway)

Hosted by LIU Yalan

Research on sustainable development strategies of terrestrial ecosystems under the dual impacts of climate change and human activities (invited)

GAO Jixi (Satellite Environmental Application Center, Ministry of Ecology and Environment, China)

Considerations on the Kunming-Montreal Global Biodiversity Framework(invited)

XU Haigen (Nanjing Institute of Environmental Sciences, Ministry of Ecology and Environment, China)

Improving monitoring for better integrated climate and biodiversity by environmental and Earth observations

LIU Yalan (Aerospace Information Research Institute, Chinese Academy of Sciences, China)

BioClima: GeoAI and multi agent learning for real time climate biodiversity intelligence

Charalampos Paraskevas (Neuralio A.I, Thessaloniki, Greece)

Development, achievements, and prospects of Chinese Forest Ecosystem Research Network (invited)

NIU Xiang (on behalf of Wang Bing) (Institute of Forest Ecology, Environment and Protection, Chinese Academy of Forestry, China)

The construction of a monitoring system and platform for human and wildlife protection under the socio-ecological coupling system (invited)

YANG Biao (Beijing Entrepreneur Environmental Protection Fund, China)

Round-table Discussion

Integration, innovation and collaboration"promote the researches on b iodiversity conservation and climate change mitigation

Host: LIU Yalan, MEI Linlu, Bob O'Hara

Hosted by Prof. Bob O'Hara

Introducing European Biodiversity Pilot Studies within EU-China BioClima Project (invited)

MA Xiang (SINTEF AS, Norway)

Bridging conservation gaps under climate change at multiple scales to protect 30% of Earth's surface by 2030

WU Hui (Tsinghua University, China)

Plant Diversity and its changes for the Mu Us Sandland in the past decade

YE Xuehua (Institute of Botany, Chinese Academy of Sciences, China)

Sustainable crop rotation modified the biophysical regulation of carbo n fluxes in meadow steppes

SHAO Changliang (Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, China)

Differentiated Low-Carbon Zoning Using a Novel Carbon Benefit Index for Sustainable development planning -a case study on Shandong's Ec osystems

WEN Hui (Qingdao University of Technology, China)

Break

Hosted by MEI Linlu

Big earth data and remote sensing for biodiversity (invited)

XUE Yong (Nanjing University of Information Science and Technology, China)

Big Data, Big Areas and Modeling Species Distributions Properly (invited)

Bob O'Hara (Norwegian University of Science and Technology, Norway)

Challenges and Opportunities in UAV Sensor Fusion for High-Resolution Biodiversity Mapping (Online)

Ionut SANDRIC (University of Bucharest, Romania)

Prioritizing vegetation restoration potential to facilitate snow leopard habitat recovery in Sanjiangyuan region

LI Renqiang (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China)

Spatial modelling of fine-scale carbon emissions based on statistical inventories and multi-source data

YAO Xiaojing (Aerospace Information Research Institute, Chinese Academy of Sciences, China)

Strategies Research on Ex-situ Conservation of threatened higher plants in Chinese botanical gardens under the goal of GBF and SDGs

WU Jianyong (Nanjing Institute of Environmental Sciences, Ministry of Ecology and Environment, China)

Estimating climate change vulnerability for the Three-River-Source National Park

LI Xinhai (Institute of Zoology, Chinese Academy of Sciences, China)

Construction of an Automated Ground-Based Biodiversity Monitoring System Based on Smart Monitoring Technologies

WANG Chenbin (Nanjing Institute of Environment, Ministry of Ecology and Environment, China)

Evaluation of the Conservation Value of Flagship Species in China's Five National Parks

XU Tingyu (Ecology and Nature Conservation Institute, Chinese Academy of Forestry, China)

Advancing Climate Change Monitoring: Derivation of Essential Climate-Relevant Variables via the XBAER Algorithm

MEI Linlu (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Develop the China-Europe Joint Biodiversity Observation System

LI Xinwu (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Session All Sustainable Development of the Earth's Cold Regions under a Warming Scenario Time 15:30-17:00, 7th September Room: 305B

SHI Jiancheng (National Space Science Center, the Chinese Academy of Sciences, China)

Co-Chairs

Massimo Menenti (Delft University of Technology, the Netherlands)

Remote Sensing of Snow Properties over Tibet Region

SHI Jiancheng (National Space Science Center, the Chinese Academy of Sciences, China)

Endeavors for Mapping Settlements in the Arctic with the Global Human Settlement Layer

Michele Melchiorri (European Commission, Joint Research Centre, Ispra, Italy)

Climate-Driven Glacier Dynamics and Impacts in Antarctica, Greenland, and the Tibetan Plateau (1996–2021)

LI Rongxing (Tongji University, China)

SMEAR Concept for Cold Regions

Joni Kujansuu (Institute for Atmospheric and Earth System Research (INAR), Finland)

Advancing Periglacial Landform Inventories on the Tibetan Plateau and Beyond FENG Min (Institute of Tibetan Plateau Research, Chinese Academy of Sciences, China)

International collaboration activities involving open and data sciences for SDGs

Masaki Kanao (Polar Environment Data Science Center, Tokyo, Japan)

Space-Based Observation Data Services and Data Service Framework of GEO Cold Regions in NODA

ZHANG Lianchong (National Earth Observation Data Center (NODA), China) **SHI Lijuan** (Henan University, China)

Great power co-opetition and Arctic sustainable development: based on Chins-US climate collaboration

XU Qingchao (Beijing Language and Culture University, China)

GEO Cold Regions for the Digital Sustainable Development Goals QIU Yubao (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Massimo Menenti (Delft University of Technology, the Netherlands)

Discussion

Topics: Guiding GEOCRI's Contribution to Achieving the Sustainable Development Goals (SDGs) in Cold Regions

Session A12	Big Ocean Data Promotes Sustainable Development	
Time	13:30-15:00, 8th September	Room: 305D
Co-Chairs	LI Xiaofeng (Institute of Oceanology Chinese Acad	emy of Sciences, China)
CO-Cliairs	WANG Fan (Institute of Oceanology Chinese Academy of Sciences, China)	
	A daily reconstructed chlorophyll-a dataset in the South china Sea from MODIS using 0l-swinUnet TANG Shilin (South China Sea Institute of Oceanology, Chinese Academy of Sciences, China) Satellite monitoring of tropical cyclones using deep learning	
XU Qing (Ocean University of China, China)		
	Global Drivers, Mapping, and Ecological Risks of Marine Microplastics HUANG Baoxiang (Qingdao University, China) Quantifying the Ocean Heat Content Uncertainty with an Observation Large Ensemble	
YUAN Huifeng (Computer Network Information Center, Chinese Aco of Sciences, China)		enter, Chinese Academy
	Machine learning techniques promote the study of internal solitary waves	
	ZHANG Xudong (Institute of Oceanology Chinese A	Academy of Sciences,
	Physics-Guided Deep Learning for Global Sea Surface Temperature Prediction: Balancing short-Term DONG Shiji (Ocean university of China, China)	

Session A13	Marine Big Data and AI Supports Marine Sustainable Development Goals		
Time	13:30-15:00, 6th September	Room: 305D	
	XUE Cunjin (International Research Center of Big Data for Sustainable Development Goals (CBAS))		
Co-Chairs	WANG Zhihua (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China)		
	Evolution analysis of the Yellow River delta wetland supported by remote sensing data		
	ZHANG Xin (Institute of Aerospace Information, Chinese Academy of Sciences, China) Dynamic monitoring of nearshore floating macroalgae disasters based on marine big data WANG Mengqiu (Department of Earth and Planetary Sciences, University of Hong Kong, China)		
	Marine big data and AI support the offshore n forecasting	nariculture risk	
WANG Zhihua (Institute of Geographic Sciences and Natural Resour			
Global ocean water quality variation monitoring by ocean color satellite remote sensing big data			
	YE Xiaomin (National Satellite Ocean Application	on Service, China)	
High-spatial Resolution Remote Sensing of Sea Surface Sunglint Reflection			
	LU Yingcheng (Nanjing University, China)		
	Typical Coral Reef Health Assessment		

ZOU Yarong (National Satellite Ocean Application Service, China)

Session A14	Big Earth Data in Support of SDG 15: Life on Land		
Time	15:30-17:00, 6th September	Room: 305D	
Co-Chairs	LI Xiaosong (Aerospace Information Research Institute, China)		
	HAN Qunli (Aerospace Information Research Inst	itute, China)	
	UNCCDOverview and way forward GUO Yufu (UNCCD)		
	Global Biodiversity Early Warning Amber Ren (UNEP)		
	Earth Observation-Driven "Three-North" Sustainable Development: Index Design and Multi-Scenario Applications LI Xiaosong (International Research Center of Big Data for Sustainable Development Goals (CBAS))		
Developing a digital twin of biosphere - a strategic action for of MAB HAN Qunli (International Research Center of Big Data for Sustain Development Goals (CBAS))		egic action for the future	
		Data for Sustainable	
	Big Data for Land Degradation Neutrality: ICoE Sunyani-Ghana Collaborative Model		
	Amos Tiereyangn Kabo-bah		
Forest conservation planning for native forests in Argentina: Integrating biodiversity and human footprint for decision-maki Guillermo MARTINEZ PASTUR (CADIC CONICET)			

Session A15	Remote Sensing for Conservation and Biodiversity		
Time	me 13:30-17:00, 7th September Room: 305D		
	YU Le (Tsinghua University, China)		
Co-Chairs	ZENG Yuan (Aerospace Information Research Institute, Chinese Academy of Sciences)		
	LIU Yalan (Aerospace Information Research Institu Sciences)	ute, Chinese Academy of	
	Rapid Biodiversity Assessment for the Kunming-Montreal Global Biodiversity Framework		
	YU Le (Tsinghua University, China)		
	Monitoring Plant Diversity by Remote Sensing Techniques: Progre and Perspective		
ZENG Yuan (Aerospace Information Research Institute, Chinese Acadof Sciences, China)		itute, Chinese Academy	
	Integrating Multi-Source Data for Consensus Biodiversity Hotspot Identification: Supporting KMGBF's 30×30 Target		
	WANG Lisong (Northeast Forestry University, Chin	na)	
	Reassessment of Global Biodiversity Hotspots a Based on Plant Occurrence Data	and Conservation Efforts	
	YU Shengxiang (Institute of Botany, Chinese Acad	lemy of Sciences, China)	
	Bigger or Better? A Comparison of Protected Area Optimization Strategies on the Tibetan Plateau		
	HUA Ting (Norwegian University of Science and Te	echnology, Norway)	
Integrated Conservation: Mapping Co-benefits of Carbon Storage a Plant Diversity in Temperate Asia		of Carbon Storage and	
	DEJENE Adugna Deme (Northeast Forestry Unive	rsity, China)	
	uences on Vegetation Restoration		
	WANG Hui (China University of Mining and Techno	ology, Beijing,China)	
	Annual Earth Terrestrial Ecosystem Mapping an	d Quality Assessment	

DU Zhenrong (Dalian University of Technology, China)

Digital Intelligence Driving Sustainable Development: The 10th Anniversary of the 2030 Agenda

Unlocking the Potential of Biosphere Reserves for the Kunming-Montreal Biodiversity Framework

WU Hui (Northeast Forestry University, China)

Analyzing Human Activities within Protected Areas across Multiple Scales Using Open Trajectory Data

WANG Pei (Tsinghua University, China)

Climate change and threatened species conservation in China: Impacts and adaptation strategies

YU Shulin (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China)



Session A18	Earth Intelligence in Action: Advancing the GEO Wildfire- Health Nexus from Monitoring to Mitigation	
Time	13:30-15:00, 8th September	Room: 305C
	BAI Yuqi (Tsinghua University, China)	
	Amadou Sall (Centre de Suivi Ecologique (CSE), Sei	negal)
	Emilio Chuvieco (University of Alcalá, Spain)	
Co-Chairs	LI Fang (Chinese Academy of Sciences, China)	
	LI Suju (National Disaster Reduction Center of Chin	a, China)
	HOU Weimin (Hebei University of Science and Tech	nnology, China)
	CAO Yufeng (Beijing Forestry University, China)	
	Global Health Impact Assessment of Future Wildfires	
	LIAO Yuanhong (Tsinghua University, China)	
	Wildfire Monitoring Systems in Senegal: MODIS Data Applications	
	Amadou Sall (Centre de Suivi Ecologique (CSE), Senegal)	
Global Fire Datasets and Climate Modeling: The Role of Sa Monitoring		Role of Satellite
	Emilio Chuvieco (University of Alcalá, Spain)	
	Satellite-Based Emergency Response for Wildfire Management	
	LI Suju (National Disaster Reduction Center of China, China)	
	Projection of boreal wildfire and carbon emission changes from 2025 to 2050	
	CAO Yufeng (Beijing Forestry University, China)	
	Remote Sensing Signal Processing for Wildfire Detection	
	HOU Weimin (Hebei University of Science and Technology, China)	
	Design of Coalfield Fire Range Detection Method Based on Multi-source Remote Sensing	
	LIU Yiheng (China University of Mining and Technology, China)	
	Mapping the Wildland–Urban Interface Based on Building-Level Wildfire Exposure Risk: A Case Study in Northern Alberta, Canada	
	WANG Zimeng (Tsinghua University, China)	

Session A19	Digital Applications and Scenario Innovation for Goal Realization		
Time	15:30-17:00, 6th September	Room: 305A	
	SUN Zhongchang (International Research Center of Big Data for Sustainable Development Goals (CBAS))		
Co-Chairs	Robert Ndugwa (UN-Habitat, Nairobi, Kenya)		
	ZHAO Mingxiao (Institute of New Economic Development, Chengdu, China)		
	A Global Perspective On the Value of Multi-level Analysis as An Enabler for Achieving SDGs Robert Ndugwa (UN-Habitat, Nairobi, Kenya)		
	Complex Urban Systems for Sustainability and Health		

Caroline Kabaria (PHRC Campus, Kitisuru, Nairobi, Kenya)

Digital Dust Tracking: MODIS, Sentinel & HYSPLIT for Smart Dust Storm Mitigation in Khuzestan

Mehdi Nadi (Sari Agricultural sciences and Natural Resources University, Sari, Mazandaran, Iran)

Assessment of Green Development Levels in Small Watersheds Across China Implications for Prioritized Management

QIN Chengxin (Tsinghua University, Beijing, China)

Report Release and Recommendation: The Current Situation and Future of the Digital Industry Development in Disaster Reduction in Sichuan Province

IRDR&iNED, China

NexTus Youth Talk: From 3D Mapping to Digital Intelligence: End-to-End LiDAR AI Solutions

XU Guangcai (GreenValley International, Beijing, China)

NexTus Youth Talk: Immersive Universe: Harnessing AR and VR to Transform Earth Science Education

HUANG Shenghui (Mirage Lab Digital Technology, Hangzhou, China)

NexTus Youth Talk: AI Avatars for Impact: Connect Youth to Promote the SDGs and Our Experiment with Chongzhou Bamboo-Craft Village ZHAO Mingxiao (iNED, Chengdu, China)

Session A20	Monitoring, Application, and Service of Sustainable Development Goals			
Time	10:10-11:40, 8th September	Room: 305A		
	LIU Liangyun (International Research Center of Big Data for Sustainable Development Goals (CBAS))			
Co-Chairs	XU Bing (Tsinghua University, China)			
	ZHANG Li (International Research Center of Big Data for Sustainable Development Goals (CBAS))			
	LUO Lei (International Research Center of Big Data for Sustainable Development Goals (CBAS))			
	Development of SDG-relevant High-level Satellite Products LIANG Shunlin (The University of Hong Kong, China)			
	Changing Capability of Flood Regulation: An Observation-based Analysis in Yangtze River Basin			
	LIN Peirong (Peking University, China)			
	Nighttime Light in China's Coastal Zone: The Type Classification Approach Using SDGSAT-1 Glimmer Imager			
	JIA Mingming (Northeast Institute of Geography and Academy of Sciences, China)	Agroecology, Chinese		
	Mapping of Asian Rice Paddies and Estimation of T Emissions	heir Methane		
	YUAN Wenping (Peking University, China)			
	Global Land Cover Dynamics and Their Drives Obs Resolution Over 1985-2022	erved at 30-m		
	LIU Liangyun (International Research Center of Big Data for Sustainab Development Goals (CBAS))			
	Carbon Monitor: Near-Real Time Carbon Emission Dataset LIU Zhu (Tsinghua University, China)			
	Quantifying Arctic Vegetation Changes with Satell LIU Caixia, HUANG Huabing (Sun Yat-sen University)	•		

Digital Intelligence Driving Sustainable Development: The 10th Anniversary of the 2030 Agenda

Unveiling the Challenges and Opportunities of Sustainable Development Goals in China: Untangling the Main Causal Relationships

HUANG Chunlin (Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences, China)

Achieving Sustainable Development Through National Innovation: Evidence from 131 Countries

ZHONG Fanglei (School of Economics, Central University for Nationalities, China)

Synergistic inversion of monthly water volume variations in lakes and reservoirs across North China using multi-source remote sensing satellites

YANG Haibo (Zhengzhou University, China)



Session B1

Pixels to Policy: Harnessing Earth-Observation and AI for Impact-Driven Development

Time

13:30-15:00, 8th September

Room: 305B

.

Hamid Mehmood (United Nations Office for Outer Space Affairs)

Co-Chairs

Serge Stinckwich (Head of Research, United Nations University Institute in Macau)

GeoAl for an Equitable Future - Localizing Foundational Models, Agentic Tools, and the Imperative for Openness

Hamid Mehmood (United Nations Office for Outer Space Affairs)

Navigating Challenges in Open-Source (Generative) AI Integration Serge Stinckwich (Head of Research, United Nations University Institute in Macau)

SALI for UN SDG 12.6.1: Advancing United Nations SDG 12.6.1 through AI-Powered Evaluation of Global Sustainability Reporting

Dr Eberechi Weli (SALI Technologies)

Panel Discussion

Topics:

The decisive decade for the 2030 Agenda demands tools that transform raw data into rapid, actionable insight. This session explores how the fusion of Earth-Observation (EO) data streams with cutting-edge GeoAl—machine-learning models that are spatially aware—can unlock new pathways for achieving the Sustainable Development Goals (SDGs). Experts from UN agencies, space agencies, academia, and youth representatives will showcase operational cases, opportunities and challenges where cloud-scale satellite analytics have measurably advanced targets on climate resilience (SDG 13), food security (SDG 2), water quality (SDG 6), sustainable cities (SDG 11), and biodiversity (SDG 15).

Discussions will move beyond technology, addressing governance, equity, and capacity-building so that all Member States—especially LDCs and SIDS—can benefit from open data, reproducible workflows, and responsible AI practices. Discussions and presentations will reveal how large EO archives, once unwieldy, are now queried in seconds to detect drought hotspots, quantify urban heat islands, and monitor carbon sinks. The session positions digital innovation not as an end in itself but as a force multiplier for inclusive, evidence-based policy.

Panel Speakers:

- **Serge Stinckwich** (Head of Research, United Nations University Institute in Macau)
- LI Pengde (Director/Jean Maurice Muneza, Geospatial Information Officer, United Nations Global Geospatial Knowledge and Information Center (UNGGKIC), Deqing (Huzhou), China)
- **Birendra Bajracharya** (Intervention Manager- Regional Information Service, The International Centre for Integrated Mountain Development, Nepal)
- LI Suju (Director of Satellite Application Department, National Disaster Reduction Centre of China (NDRCC), Ministry of Emergency Management of China)
- Sevilla Nanqi Zhou (United Nations Regional Coordinator Office, China)
- LI Xi (Professor, State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University)

Session B4 Data and AI for Disaster Risk Reduction

Time 10:30-12:00, 7th September (UTC+8) Room: 305D

Meeting ID 815 064 1166 Passcode: gosc

LI Jianhui (International Research Center of Big Data for Sustainable Development Goals (CBAS); Nanjing University, China)

Co-Chairs Francis P. Crawley (CODATA International Data Policy Committee (IDPC))

ZHANG Lili (Computer Network Information Center, Chinese Academy of Sciences (CNIC, CAS), China; GOSC IPO)

Ethics and Governance in Al-Enhanced Disaster Risk Reduction Francis P. Crawley (CODATA)

Future-led Disaster Risk Reduction: Perspective from IRDR YANG Saini (IRDR)

Using big data and AI for disaster mitigation

Bapon Fakhruddin (Green Climate Fund, online)

Building Damage Assessment from Multi-Source Remote Sensing Images Using Diffusion Models

WANG Yue (Aerospace Information Research Institute, CAS; Institute of Disaster Prevention, China)

Disaster Risk Reduction, Data Policies, Hazard Information Profiles

Virginia Murray (Public Health England, online)

Open Data Infrastructure for Disaster Risk Mitigation

ZHANG Lili (GOSC IPO & CNIC, CAS, China)

Panel Discussion

Topics:

- 1.Why AI for SDGs?
- 2. Gaps to bridge for AI4SDGs.
- 3. Future envisions especially from the open science infrastructure perspective.

Panel Speakers:

LI Jianhui (Nanjing U, Asia); Francis P. Crawley (CODATA, Europe); Tiziana Ferrari (EGI, Europe); YANG Saini (IRDR, International); Bapon Fakhruddin (Green Climate Fund, International, online, TBC); Hussein Sherief (AASCTC, Ethiopia, Africa); Joseph Wafula (JKUAT, Africa, TBC); Agnes Kiragga (APHRC, Africa, TBC); ZHANG Lili (CNIC, CAS, Asia)

Session B5 Al in Land Resources Utility and Management with High Efficiency

Time 10:10-11:40, 8th September Room: 305D

Co-Chair WU Xihong (Peking University, China)

Risk assessment for large river dams based on SAR detection ZHOU Jianmin (Aerospace Information Research Institute, Chinese Academy of Sciences, China)

The theoretical analysis of suspended sediment in waves with differen t boundary conditions and diffusivity

Xie Yiqin (China Institute of Water Resources and Hydropower Research, China)

Dual evaluation technology for national spatial planning supported by big data

GUO Rui (Institutes of Science and Development, Chinese Academy of Sciences, China)

Radiometric calibration of GF 5A/WTI sensor using ground calibration s ites

LI Kun (Aerospace Information Research Institute, the Chinese Academy of Sciences, China)

Multi source data supports green development evaluation

WANG Hongbing (Institutes of Science and Development, Chinese Academy of Sciences, China)

Modelling and predicting the changes of threatened terrestrial species by using AI algorithm

MA Yuanxu (Aerospace Information Research Institute, the Chinese Academy of Sciences, China)

Session B6	Digital Technology and Spatiotemporal Intelligence for Enhancing Urban Resilience and Promoting High-Quality Development	
Time	10:30-12:00, 7th September	Room: 305B
Co-Chair	LIU Min (East China Normal University, China)	
	Real-Time Spatiotemporal Analytics and Digital Technologies: Transforming Urban Resilience and Quality of Life	
	Rahul Dev Garg (Indian Institute of Technology (IIT) Roorkee, India)	
Developing CA and Machine Learning approaches for sustai simulation		for sustainable urban
	YAN Liu (Chinese University of Hong Kong,China)	
	Multi-scale spatiotemporal modeling of urban population dynamic	
HUANG Bo (The University of Hong Kong, China)		
	Urban Fusion Sensing	
	YU Liu (Peking University, China)	
	A MultiCriteria Analysis of Social, Economic, and Risks for Enhancing Urban Resilience in SubCatch	
	Shray Pathak (Indian Institute of Technology Ropar	, India)
	Flood impact assessment under "720" heavy rain City: based on an urban functional response curv framework	•
	GAO Meiyan (Zhengzhou University, China)	

Session B8	Al Models and Big Data Construction and Applications for Flood Control and Disaster Reduction		
Time	13:30-15:00, 8th September Room: 310		
	GOURBESVILLE Philippe (International Associa Environment Engineering and Research)	ition for Hydro-	
Co-Chairs	LIU Changjun (China Institute of Water Resource Research, China)	es and Hydropower	
Added value of emerging solutions for addressing flood contradisaster management GOURBESVILLE Philippe (International Association for Hydro-Environment Engineering and Research) A High-Spatial-Accuracy Global River Dataset via Multi-Source Data Fusion		sing flood control and	
		ition for Hydro-	
		via Multi-Source Vector	
	LIU Yesen (China Institute of Water Resources an China)	nd Hydropower Research,	
	Automated construction of emergency knowl flood disasters based on large language mode YE Peng (Yangzhou University, China)	0 0 .	
AI Models for Detecting Basin Pollution Risk Sources into River		ources into River	
	Huang Yaohuan (Institute of Geographic Science Research, Chinese Academy of Sciences, China)	es and Natural Resources	
	Higher accurate flash floods and debris flows model coupling HiPlMs and FLO-2D	simulation: A hybrid	

Dong Yitong (Institute of Zhengzhou University, China)

Session B9	ion B9 Quantum Intelligent Computing for Sustainable Development Goals	
Time	13:30-15:00, 8th September	Room: 305A
Co-Chairs	YUE Tianxiang (Institute of Geographic Sciences and Natural Resources Research, CAS, China)	
	ZHAO Na (Institute of Geographic Sciences and Research, CAS, China)	Natural Resources
	A platform protype of quantum machine learn YUE Tianxiang (Institute of Geographic Science Research, CAS, China)	_
	A novel quantum shadow tomography methor expectation value estimation WANG Yu (Beijing Institute of Mathematical Scientifical)	
	Geographic modeling research based on quar framework	ntum-HPC fusion
	LIU Yi (Beijing Institute of Mathematical Science	es and Applications, China)
	Geospatial intelligence in quantum era: the ir quantum algorithms in HASM	nplementation of
	WU Chenchen (Institute of Geographic Sciences Research, CAS, China)	s and Natural Resources

Session B10	AI for Sustainable Development: Data, Mod	els and Insights
Time	10:10-11:40, 8th September	Room: 302
	WANG Jie (Pengcheng Laboratory)	
Co-Chairs	HUANG Huabing (Sun Yat-sen University)	
	WANG Xiaoyi (Institute of Tibetan Plateau Research CAS)	
	Bridging scientific research and policy action usin and Artificial Intelligence for global monitoring of wetlands under UN SDG Indicator 6.6.1 Dany Ghafari (UNEP)	•
	Public Health Threats from Groundwater Arsenic	Contamination:
	Global Patterns of Risk and Exposure WU Ruohan (Sun Yat-sen University, China)	
	A multi-source monitoring framework towards a rintegration of tropical forest regeneration and res HE Zhang (The University of Hong Kong, China)	
	Mapping global center-pivot irrigated cropland wi guided data augmentation and deep learning LIU Xiangyu (Pengcheng Laboratory, China)	ith knowledge-
	Dynamic mapping from static labels: remote sens generation with temporal-spectral embedding YUAN Shuai (The University of Hong Kong, China)	ing dynamic sample

Session B11	AI for Early Warning Environment	
Time	13:30-15:00, 6th September	Room: 310
Co-Chair	REN Quanying (UNEP HQ Nairobi Kenya, UN)	
	Air pollution monitoring and Early Warning for Air Pollution ZHU Tong (Peking University, China)	
	Biodiversity loss monitoring and Early Warning for Biodiversity loss ZHANG Li (Beijing Normal University, China)	
Climate change risk and adaptation strategies in giant panda populations: insights from habitat area changes and bioclimat velocity		and bioclimatic
	NING Lehua (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China)	
Fostering Global Partnerships for SDG Acceleration: Advancing Arsenic-Free Drinking Water through Innovative Metal — Phenolic Nanocomposite Sorbents TASRINA RABIA CHOUDHURY (Bangladesh Atomic Energy Commiss		Metal—Phenolic
	Bangladesh)	
	Locals perceive the protected area providing econglobally but disservices restricted locally Daya Raj Subedi (Beijing Forestry University, China	

Session C1 Big Earth Data and Al for Disaster Risk Reduction in the Belt and Road Region

Time 10:30-12:00, 7th September Room: 305C

CHEN Fang (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Co-Chairs Rajib Shaw (Keio University, Japan)

WANG Lei (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Oral Presentation

Spatio-temporal Appraisal of Glacial Lakes, Susceptibility Analysis and Potentials of Glacial Lake Outburst Floods in the Peri-Glacial Environment of Western Himalayas

Atta ur Rahman (Department of Geography and Geomatics, University of Peshawar, Peshawar, Pakistan)

The Importance of Qualitative Big Data in Sustainable Development Goals: Building a Community-Based Data Collection and Utilization Framewor

Yasutaka Ozaki (Keio University Graduate School of Media and Governance, Japan)

Integrating the OODA-SOAP Framework for Citizen-Centered Disaster Health Risk Management: A Digital Community-Based Nursing Innovation Supporting the SDGs

Sakiko Kanbara (Kobe City College of Nursing, Japan)

Panel Discussion

Topics: Opportunities and Challenges with Big Earth Data and AI for Disaster Reduction Cooperation

Moderator:

Rajib Shaw (Keio University, Japan)

CHEN Fang (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Panel Speakers:

Amod Mani Dixit (National Society for Earthquake Technology - Nepal (NSET), Nepal)

Basanta Raj Adhikari (Tribhuvan University, Nepal)

Suresh Chaudhary (National Society for Earthquake Technology - Nepal (NSET), Nepal)

Md. Anwarul Abedin (Bangladesh Agricultural University, Bangladesh)

Md. Shamsuzzoha (Patuakhali Science and Technology University, Bangladesh)

Atta ur Rahman (University of Peshawar, Pakistan)

Deepthi Wickramasinghe (University of Colombo, Sri Lanka)

Nurfashareena Muhamad (Universiti Kebangsaan Malaysia, Malaysia)

Zainun Binti Mustafa (Sultan Idris Education University, Malaysia)

JIA Gensuo (Institute of Atmosphere Physics, Chinese Academy of Sciences, China)

HAN Qunli (International Research Center of Big Data for Sustainable Development Goals (CBAS))

WANG Lei (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Session C2 From Innovation to Impact: Scaling Digital and Data Solutions through South-South and Triangular Cooperation

Time 15:30-17:00, 6th September Room: 305B

Co-Chair Xiaojun Grace WANG, Trust Fund Director, UNOSSC

United Nations Office for South-South Cooperation (UNOSSC)

Organizer International Research Center of Big Data for Sustainable Development Goals (CBAS)

Opening remarks

LIU Jie (International Research Center of Big Data for Sustainable Development Goals (CBAS))

LI Shuyin (China International Center for Economic and Technical Exchanges, China)

Moderated presentation: Experience exchange (30m, 5m each)

LIU Wenyu (Euro-Asia Water Resources Research and Utilization Center)

WU Tong (Xiamen New Power System Research Institute, Fujian province)

JIN Wei (Pinghu Municipal Bureau of Development and Reform, Zhejiang province)

Birendra Bajracharya (International Centre for Integrated Mountain Development (ICIMOD))

ZHOU Yibo (Nanjing Municipal Bureau of Agriculture and Rural Affairs, Jiangsu province)

Q&A (10m)

Discussion: Replication and Promotion of Best Practices from the Perspective of South-South Cooperation (35m)

Questions:

Complementary Mechanisms and Resource Integration

In the international agriculture cooperation, how can we effectively identify and integrate the technological, data, and institutional strengths of different stakeholders to build complementary digital solution partnerships"

Inclusive Challenges and the Digital Divide

In the international green energy field, how can cooperation help bridge the digital infrastructure and capacity gaps within and between developing countries to ensure that data-driven solutions are inclusive and sustainable?

Pathways to Scale and Governance Innovation

For cross-border e-commerce, what policy tools or cooperation models can accelerate the transition of successful digital practices from pilot to scale, and directly align them with priority areas of the Sustainable Development Goals (SDGs)?

Panelists:

LIN Huifang (Deputy Director-General, Foreign Economic Cooperation Center (FECC), MARA)

HUANG Yan (International Center on Small Hydro Power (ICHSP))

BAI Xiaofeng (China-Africa Business Council; United Nations Global Geospatial Knowledge and Innovation Centre (UN-GCKIC) (TBC))

Closing remarks (5m)

LU Shanlong (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Session C4	Policy Guidance and the Digital Intellig Regional Sustainable Development	gence Industry Promote
Time	13:30-15:00, 6th September	Room: 305B
	Marcelin SANOU (M&E Officer, PAGGW, Maurita	nnia)
Co-Chairs	Dr Sakhoudia THIAM (Chief of R&D department PAGGW, Mauritania)	
	Strategies for restoring degraded lands in the the Great Green Wall Initiative: What approaresearch?	•
	Marcelin SANOU (Pan African Agency of the Gro	eat Green Wall)
	Présentations and Panel Speakers: Innovative Strategies for Degraded Ecosyster Research Initiatives: the African Great Green Dr Innocent Aleyni (M&E Officer, National Ager	Wall Approach

(NAGGW), Nigeria)

Experiences of youth organizations in land restoration in the Great Green Wall

M. Sani Ayouba Abdou (Executive Director, Jeunes Volontaires pour l' Environnement (JVE; Niamey/Niger))

GGW Accelerator support for scaling up land restauration activities Gilles Amadou Ouedraogao (Programme Management Officer GGW Accelerator | Global Mechanism - United Nations Convention to Combat Desertification (UNCCD))

Contribution of advanced Earth observation and big data analysis technologies to land restoration and conservation in the GGW LI Xiaosong (Dr. & Prof, Great Green Wall Focal Point CBAS; Aerospace Information Research Institute CAS)

Big Data for Disaster Risk Reduction along the Belt and Road: **Session C5 Challenges and Innovations** 13:30-15:00, 7th September **Room: 305B** Time WANG Juanle (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences) Faith Chan (Head of School of Geographical Sciences, University of **Co-Chairs** Nottingham Ningbo China) **LI Congrong** (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences) Wildfire risk under extreme climate conditions **XU Xiyan** (Institute of Atmospheric Physics, Chinese Academy of Sciences, China) The sponge city program (SCP) in China-Challenges and Opportunities Faith Chan (Head of School of Geographical Sciences, University of Nottingham Ningbo, China) Big data driven disaster risk reduction in the Belt and Road regions **WANG Juanle** (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China) Data Indicators and Database Construction Design for Flood Emergency Management **LI Congrong** (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China) **Exploring Glacier Lake Outburst Flood in High Mountains Asia Asma Tanveer** (Institute of Geographic Sciences and Natural Resources

Research, Chinese Academy of Sciences, China)

Session C6 Big Data Services for Sustainable Development Goals

Time 15:30-17:00, 6th September Room: 310

NIE Xiaowei (Institute of Tibetan Plateau Research, Chinese Academy of Sciences, China)

PAN Xiaoduo (Institute of Tibetan Plateau Research, Chinese Academy of Sciences, China)

Event 1: Presentations

Papua New Guinea ICT Policy Gaps and Strategies for Sustainable Development Goals

DUGUMAN Pero Lawrence (Department of National Planning and Monitoring, UN)

The Energy System Transition Pathway Towards Carbon Reduction Using a Model-Coupling Approach (Invited)

ZHENG Jiali (Xi'an Jiaotong University, China)

Leveraging Weibo Check-in Big Data for Understanding Sustainable Development in Tibet (Invited)

WANG Liangxu (Shanghai Normal University, China)

The Role of Big Data Analytics and Blockchain Technology in Supporting Green Supply Chain Operations and Sustainable Development: Evidence from the Global South

KHOLAIF, Moustafa (Institute of Tibetan Plateau Research, Chinese Academy of Sciences, China)

Event 2: Round Table Discussion

Topics:

Big Data Services for Sustainable Development Goals

Panel Speakers:

DUGUMAN Pero Lawrence (Department of National Planning and Monitoring, UN)

NIE Xiaowei (Institute of Tibetan Plateau Research, Chinese Academy of Sciences, China)

PAN Xiaoduo (Institute of Tibetan Plateau Research, Chinese Academy of Sciences, China)

WANG Liangxu (Shanghai Normal University, China)

ZHENG Jiali (Xi'an Jiaotong University, China)

KHOLAIF, Moustafa (Institute of Tibetan Plateau Research, Chinese Academy of Sciences, China)

Session C8	Seminar on Promotion and Demonstration of Digital Technologies for Sustainable Development	
Time	10:30-12:00, 7th September	Room: 305E
Co-Chairs	ZHANG Li (International Research Center of Bi Development Goals (CBAS))	g Data for Sustainable
	WANG Lei (The Administrative Center for China's Agenda 21, ACCA21)	
Remarks (10') Moderator: ZHANG Li (International Research Center of Big D Sustainable Development Goals (CBAS))		
		n Center of Big Data for
	Technical Presentations (60')	
	Moderator: WANG Lei (The Administrative Ce ACCA21)	nter for China's Agenda 21,
Panel Discussion (45')		
	Moderator: LI Jianhu (Deputy Director General Research Center of Big Data for Sustainable De	
	Conclusion (5')	
	CHEN Fang (Deputy Director General of CBAS, Center of Big Data for Sustainable Developmen	

Session D1 Reflections on Sustainable Development Goals to co-creating the Post-2030 Agenda

Time 13:30-15:00, 8th September Room: 302

Prajal Pradhan (University of Groningen (Moderator))

XING Qiang (International Research Center of Big Data for Sustainable Development Goals (Commentor))

CHEN Fang (International Research Center of Big Data for Sustainable Development Goals(Moderator))

Commentor CHEN Min (Nanjing Normal University, China) online

Four governance reforms to strengthen the SDGs
Frank Biermann (Copernicus Institute of Sustainable Development) online

Reflect on Global Sustainable Development Report (GSDR) 2023 for the post 2030 Agenda

Shirin Malek Pour (Monash University) online

Panel Discussion

Topics:

Sustainable development is the eternal theme of mankind. However, as 2030 approaches, the progress of the United Nations SDGs is not ideal overall. Based on this, researchers need to start considering what kind of development agenda the world needs after 2030 from a multidisciplinary and multi-perspectives to continue to guide human development. This topic intends to discuss and summarize the experiences and lessons learned in the current SDGs framework and put forward suggestions on the post-2030 agenda.

- 1) What are the key lessons learned in the SDG framework?
- 2) What are the main suggestions to Post-2030 Agenda?
- 3) What are the feasible methods can be used to identify the lessons systematically?
- 4) What needs to be done for co-creating Post-2030 Agenda from academia?

Panelists:

Csaba Kőrösi (the 77th President of the UN General Assembly, Hungary)

LI Yingtao (Professor, Beijing Foreign Studies University, China)

ZHAO Wenwu (Professor, Beijing Normal University, China)

CAO Min (Professor, Nanjing Normal University, China) online

Maheswar Rupakheti (vice-chair of Working Group I of IPCC, RIFS Potsdam

- Science for Sustainability, Germany) online

Ranjula Bali Swain (Professor, Södertörn University, Sweden) online

Ram Kumar Phuyal (Expert-Professor of Economics, Tribhuvan University, Former Member, National Planning Commission, Government of Nepal) online

Session E1	AgriFood System	
Time	10:10-12:04, 8th September	Room: 305B
	ZENG Yelu (China Agricultural University, China)	
Co-Chairs	PRAJAL Pradhan (University of Groningen, Netherlands)	
	LI Wenjuan (Institute of Agricultural Resources and China)	Regional Planning,
10:10-10:20	The Compound Effects of Climate Change Trends Drought/Flooding Disasters on Food Security ZHANG Miao (Aerospace Information Research Inst Academy of Sciences, China)	
10:20-10:30	Remote sensing estimation of above-ground biomass of winter wheat by coupling digital growth period: mechanism and transferability applications LI Zhenhai (Shandong University of Science and Technology, China)	
10:30-10:40	Inversion of total photosynthetic area index of oilseed rape based on a multilayer microwave scattering semiempirical model adapted to each phenological stage WU Shangrong (Institute of Agricultural Resources and Regional Planning, CAAS, China)	
10:40-10:50	Research on Intelligent Phenotypic Analysis Algo Population Canopy Structure Driven by Syntheti GAO Yangmingrui (Nanjing Agricultural University,	c Data
10:50-11:00	Reducing water productivity gap by optimizing in winter wheat-summer maize system in the North WANG Bo (Institute of Agricultural Resources and R CAAS, China)	n China Plain
11:01-11:08	Integrating UAV-Derived Enhanced Disease Detector Texture Features for Monitoring Southern Corn Research WEI Yanan (China Agricultural University, China)	
11:09-11:16	Inversion of the High-Resolution Mechanically H Defoliation Effect Using GAN-Based Super-Resolu RGB Satellite Images MA Yiru (Shihezi University, China)	

11:17-11:24	Plant Height Extraction from 3D Reconstructed Point Clouds in Maize Fields and Inversion Based on Crop Spectral Features
	LI Ke (China Agricultural University, China)
11:25-11:32	Mapping of long-term crops in the Northeast Black Soil Region Based on multi-source sample fusion
	BAI Chaoyang (Hebei GEO University, China)
11:33-11:40	Impact of rural-urban land interaction on food security in the Beijing- Tianjin-Hebei region
	LV Keyi (Aerospace Information Research Institute, Chinese Academy of Sciences, China)
11:41-11:48	An Identification Method for Typical Maize Planting Areas Based on Spatio-temporal Feature Optimization
	JIANG Yuhan (China Agricultural University, China)
11:49-11:56	Research Progress on Disaster Resistance Capacity of Well-facilitated Farmland Construction
	MAO Yiru (Aerospace Information Research Institute, Chinese Academy of Sciences, China)
11:57-12:04	Synergy Use of Decametric Satellite Imageries and UAV Observations for Continuous Monitoring of Paddy Rice NDVI
	REN Zihan (Institute of Agricultural Resources and Regional Planning, CAAS, China)

Inland Water Dynamics	
15:30-17:50, 7th September	Room: 305A
ZHOU Xudong (Ningbo University, China)	
PI Xuehui (Tongji University, China)	
CHEN Xidong (The University of Hongkong, HK	SAR)
WANG Shenglei (The International Research Constainable Development Goals (CBAS))	enter of Big Data for
Satellite-based remote sensing of soil moistuapplications	re: from algorithms to
ZHAO Tianjie (Aerospace Information Research Academy of Sciences, China)	Institute, Chinese
Monitoring and attribution analysis of terreschanges in the Loess Plateau based on GRAC	_
HU Qingfeng (North China University of Water Power, China)	Resources and Electric
GNSS hydrology: Defining a new interdiscipli	ine integrating GNSS
WAN Wei (Peking University, China)	
AI and Cloud Computing-Driven Near-Real-Ti Resolution Surface Water	me Extraction of High-
SONG Jia (The Institute of Geographic Sciences Research, Chinese Academy of Sciences, China)	
Integrating SWOT with multi-source satellite daily reservoir water level monitoring	observations for near-
ZHAN Pengfei (Nanjing Institute of Geography Academy of Sciences, China)	& Limnology, Chinese
Big Geospatial Data-Enabled Quantitative Un Flood Regulation Processes	nderstanding of Regional
ZHENG Kaihao (Peking University, China)	
Changes in global fluvial sediment concentra	ntions and fluxes between
SUN Xianghan (Eastern Institute of Technology	v, Ningbo, China)
	ZHOU Xudong (Ningbo University, China) PI Xuehui (Tongji University, China) CHEN Xidong (The University of Hongkong, HK WANG Shenglei (The International Research Coustainable Development Goals (CBAS)) Satellite-based remote sensing of soil moistanplications ZHAO Tianjie (Aerospace Information Research Academy of Sciences, China) Monitoring and attribution analysis of terrest changes in the Loess Plateau based on GRAC HU Qingfeng (North China University of Water Power, China) GNSS hydrology: Defining a new interdiscipling hydrogeodesy and remote sensing WAN Wei (Peking University, China) Al and Cloud Computing-Driven Near-Real-Timesolution Surface Water SONG Jia (The Institute of Geographic Sciences Research, Chinese Academy of Sciences, China) Integrating SWOT with multi-source satellited daily reservoir water level monitoring ZHAN Pengfei (Nanjing Institute of Geography Academy of Sciences, China) Big Geospatial Data-Enabled Quantitative Unifood Regulation Processes ZHENG Kaihao (Peking University, China) Changes in global fluvial sediment concentrations and concentrations anatural concentration and concentrations and concentrations and co

16:40-16:50	Remote Sensing Estimation of Nutrient Concentrations and Stocks in Shallow Lake Waters XIONG Junfeng (Nanjing Institute of Geography & Limnology, Chinese Academy of Sciences, China)
16:51-16:55	Investigating the Global Applicability of Satellite River Altimetry in Monitoring Flood Peak Timing ZHOU Xudong (Ningbo University, China)
16:56-17:00	Deciphering the Daily Spatiotemporal Dynamics and Mechanisms of Floods in The Taklimakan Desert TURSUN Arken (Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences, China)
17:01-17:05	Climate Change Accelerates the Evolution of Reorganized River-Lake Systems on the Tibetan Plateau KUANG Xinya (The Hong Kong Polytechnic University, HK SAR)
17:06-17:10	Expansion of aquatic vegetation in northern lakes amplified methane emissions LIU Jinying (Sun Yat-sen University, China)
17:11-17:15	Integrated Analysis of Biogenic Element Cycling, Microbial Community Structure, and Functional Gene Expression in Effluent- Affected Aquatic Systems SHAO Bo (Tianjin University, China)
17:16-17:20	Evaluation of water-friendly cities based on SDGSAT-1 satellite data LI Xinyun (Aerospace Information Research Institute, Chinese Academy of Sciences, China)
17:21-17:25	From Temporary to Permanent: Understanding How Surface Water Affects Economic Growth ZHANG Yuejie (Capital Normal University, China)
17:26-17:30	Improved Water Quality Prediction with A Tabular Foundation Model LIU Xiaofeng (Michigan Institute for Data and AI in Society, University of Michigan, US)
17:31-17:35	Revealing four decades of water clarity dynamics in Beijing-Tianjin-Hebei, China using Landsat series data and semi-analytical model SOMASUNDARAM Deepakrishna (Aerospace Information Research Institute, Chinese Academy of Sciences, China)

17:36-17:40	Adjacency effect on Rayleigh scattering radiance for satellite remote sensing of river waters	
	ZHAO Yaqi (Zhejiang University, China)	
17:41-17:45	Drivers of Spatial-temporal Water Color Dynamics in Baiyangdian Lake: Insights from Landsat on Climate Change and Landscape Pattern	
	ZHAO Yelong (The Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, China)	
17:46-17:50	Shifting patterns of China's lake colour driven by climate change and land cover and implications for implementation of SDG6	
	YING Huanchang (Aerospace Information Research Institute, Chinese Academy of Sciences, China)	

Session E3	Global Urban Watch		
Time	13:00-15:00, 7th September	Room: 305A	
	CAO Min (Nanjing Normal University, China)		
Co-Chairs	LI Xuecao (China Agricultural University, China)		
	LIANG Xun (China University of Geosciences (Wuhan), China)		
	Global human footprint mapping and simulation LI Xuecao (China Agricultural University, China)	1	
	Urban Grey-Green Scales: The dynamic configuration relationship of urban grey-green space moves from imbalance to balance in arid zone of northern China		
	WANG Xi (Lanzhou Jiaotong University, China)		
	Trends in habitat quality and habitat degradation protected areas	n in terrestrial	
	ZHAO Jianqiao (China Agricultural University, Chir	na)	
	Dynamic urban development reshapes Water-Fo priorities: Evidence from 335 Chinese cities	ood-Ecology Nexus	
	ZHANG Yali (Nanjing Normal University, China)		
	An Open Simulation Framework for Geospatial F System Implementation and Validation of the Pl GeoScene		
	CHEN Zhiyu (China University of Geosciences (Wuh	nan), China)	
	SDG interactions and modeling		
	CAO Min (Nanjing Normal University, China)		
	Changes in urban heat island intensity during he	eatwaves in China	
	SHI Zitong (National Institute of Natural Hazards, 0	China)	
	SDG Future Scenario Modeling and Prediction		
	ZHAO Yuting (Nanjing Normal University, China)		
	Monthly CPI Mixing Prediction in Fujian Province Residual Correction Method	e Based on KAN	
	MIAO Yifei (China University of Geosciences (Wuha	n), China)	

Fusion of Vegetation Subtypes and Multi-Temporal Land Use Data for Spatiotemporal Carbon Storage Projection Across China

SHEN Annuo (China University of Geosciences (Wuhan), China)

Research on Reasoning and Application of SDG Interactions Leveraging Geographic Knowledge Graphs

HU Zhengyang (Nanjing Normal University, China)

Urban Greening and Changes in Urban Tree Cover in China

ZHANG Xiaoxin (The University of Hong Kong, China)

From Pixels to Policy: A Generative AI Framework Coupling Explainable Spatial Simulation and LLMs for Actionable Policy Generation

QUAN Xin (China University of Geosciences (Wuhan), China)

Nonlinear Impacts of Online Traffic and Tourism Activities on Residents' Living Circle Behaviors: With a Discussion on the Sustainable Development of Tourism and Local Communities

CUI Zhe (Beijing Municipal Institute of City Planning & Design, China)

Climate and Disasters			
10:30-12:30, 7th September	Room: 305A		
ZHANG Xiang (China University of Geosciences (Wuhan))			
JI Peng (Nanjing University of Information Science and Technology)			
LIU Xingpeng (Northeast Normal University)			
Aminjon Gulakhmadov (National Academy of Sciences of Tajikistan)			
Integrated Risk Zoning for Accurate Disaster Management at the 10:30-10:45 Watershed Scale			
The role of VPD on the urban heat islands and hover CONUS	leat waves interaction		
WANG Linying (Institute of Atmospheric Physics, Sciences)	Chinese Academy of		
Rapid Transition from Heavy Precipitation to Exheatwaves in Global Hotspot Regions	ktreme humid		
FANG Jian (Huazhong Normal University, China)			
Drought Recurrence Across China Under Divers (1941–2023)	e ENSO and IOD Modes		
LIU Zhenchen (Hohai University, China)			
Widespread global exacerbation of extreme drourbanization	ought induced by		
HUANG Shuzhe (Wuhan University, China)			
Excess water availability in northern mid-high l migrated from ocean under climate change	atitudes contiguously		
GUAN Yansong (The Chinese University of Hong K	(ong, China)		
Attribution of the 2021 compound drought-hea Central Asia to multiple drivers	twave event over		
YANG Yaqi (China University of Geosciences, Chin	a)		
Analyzing Drought-Induced Vulnerability of Ind Domestic Water: A Case Study of the Beijing-Tia CHEN Zihan (Zhengzhou University, China)			
	ZHANG Xiang (China University of Geosciences (W. JI Peng (Nanjing University of Information Science LIU Xingpeng (Northeast Normal University) Aminjon Gulakhmadov (National Academy of Science Integrated Risk Zoning for Accurate Disaster Mawatershed Scale ZHOU Lei (Beijing University of Civil Engineering and The role of VPD on the urban heat islands and hover CONUS WANG Linying (Institute of Atmospheric Physics, Sciences) Rapid Transition from Heavy Precipitation to Enheatwaves in Global Hotspot Regions FANG Jian (Huazhong Normal University, China) Drought Recurrence Across China Under Divers (1941–2023) LIU Zhenchen (Hohai University, China) Widespread global exacerbation of extreme drourbanization HUANG Shuzhe (Wuhan University, China) Excess water availability in northern mid-high limigrated from ocean under climate change GUAN Yansong (The Chinese University of Hong & Attribution of the 2021 compound drought-head Central Asia to multiple drivers YANG Yaqi (China University of Geosciences, China Analyzing Drought-Induced Vulnerability of Inda Domestic Water: A Case Study of the Beijing-Tia		

12:01-12:05	Global increase in future compound heat stress-heavy precipitation hazards and associated socio-ecosystem risks		
12.06.12.10	ZHOU Zhiling (Changjiang River Scientific Research Institute, China) Hazard Assessment of High-Intensity Forest Fires in Northeast China Board on Machine Learning		
12:06-12:10	Based on Machine Learning MA Bing (Northeast Normal University, China)		
12:11-12:15	Ensemble Learning-Based Simulation and Assessment of Compound Heatwaves in the Yangtze River Delta Region		
	ZHANG Xinyi (Nanjing University of Information Science & Technology, China)		
12:16-12:20	Crop Dynamic Root Depth Matched High-resolution Multi-layer Soil Moisture Dataset and Corresponding Agricultural Drought Index LIU Xin (China University of Geosciences, China)		
12:21-12:25	High-intensity forest fire early warning in fire-prone areas GA Rima (Northeast Normal University, China)		
12:26-12:30	The Physiological and Structural Responses of African Vegetation to Extreme Drought based on Multi-spectral Satellite Remote Sensing Datasets ZHAO Yuqiao (China University of Geosciences, China)		

Session E5	Ecosystem and energy		
Time	10:10-12:14, 8th September	Room: 310	
Co-Chairs	JIA Mingming (Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences)		
	LI Wang (Aerospace Information Research Institu Sciences)	te, Chinese Academy of	
	WANG Dezhi (Hubei University, China)		
	WU Mingquan (Aerospace Information Research Institute, Chinese Academy of Sciences)		
10:10-10:20	Night-time light remote sensing – from research to operation LI Xi (Wuhan University, China)		
10:20-10:30	Big data supports the sustainable development of coral reefs ZUO Xiuling (Guangxi University, China)		
10:30-10:40	Application and Progress of Lidar Technology in Mangrove Ecology WANG Dezhi (Hubei University, China)		
10:40-10:50	Spatio-temporal analysis of litterfall load in the lower reaches of Qarqan and Tarim rivers using BP neural networks ANWAR Eziz (Xinjiang Institute of Ecology and Geography, Chinese		
	Academy of Sciences)		
10:50-11:00	Potential Technical Risk Identification and Ear Electrochemical Energy Storage Field	ly Layout Warning for	
	DONG Jinfeng (National Science Library (Chengo Sciences)	du), Chinese Academy of	
11:00-11:10	A concise real-time identification method of m period based on remote sensing time informat machine learning algorithm		
	ZHU Bingxue (Northeast Institute of Geography a Chinese Academy of Sciences)	and Agroecology,	
11:10-11:20	Remote Sensing Identification and Analysis of Electrification (2012–2023)	Global Building	
	WU Mingquan (Aerospace Information Research Academy of Sciences)	Institute, Chinese	

11:21-11:26	Substantial rehabilitation of mangrove forests along the Indus Delta Coastline of Pakistan: A 33-year review SARFRAZ Ahmed (Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences)
11:27-11:32	Multi-scale Analysis on the Correlation between Landscape Pattern and Water Quality in Hainan Tropical Rainforest National Park PAN Jiaqin (Huazhong Agricultural University, China)
11:33-11:38	Utility-Scale Solar Farms Enhance Vegetation Growth in Non-Humid Regions of China: Ecological Insights from Extensive Photovoltaic Deployment YAO Zhiying (China Agricultural University, China)
11:39-11:44	Detection of Farmland Soil Structure Using Continuous Wavelet Transform Time-Frequency Analysis QIAO Guanyu (China Agricultural University, China)
11:45-11:50	Predicting Monthly Urban Electricity Consumption Based on Nighttime Light Remote Sensing: A Study on Yangtze River Delta Urban Agglomeration CHEN Shuo (Aerospace Information Research Institute, Chinese Academy of Sciences)
11:51-11:56	Simulation of nitrogen load and optimization of nitrogen fertilizer management in watershed based on CNMM-DNDC model LI Jiawen (Hebei GEO University, China)
11:57-12:02	Global effects of sustainable development goals progress on transboundary basins LI Meiping (Nanjing University, China)
12:03-12:08	Joint Impacts of Spatial Resolution and Precipitation Data on Hydrological Modeling Uncertainty YE Ting (Wuhan University, China)
12:09-12:14	Global Fine-Scale Assessment of the Technical and Economic Potential of Solar Photovoltaic Power Using Google Earth Engine SU Boxiong (Aerospace Information Research Institute, Chinese Academy of Sciences)

Session E7 Integrated Evaluations and Interactions

Time 10:10-12:00, 8th September Room: 305E

REN Huazhong (Peking University, China)

Co-Chairs XU Zhenci (The University of Hong Kong, China)

LUO Lei (International Research Center of Big Data for Sustainable Development Goals (CBAS))

SDGSAT-1 Satellite Thermal Infrared and Nighttime Data Inversion and Analysis

REN Huazhong (Peking University, China)

Accelerating SDGs Transformation Through an Optics Lens: the Sunlight-7 Diagnostic-Intervention Framework

LUO Lei (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Analysis of the Saturation Effect of Vegetation Indices

YAN Kai (Beijing Normal University, China)

Post-Fire Forest Damage Assessment and Recovery Prediction Based on Multi-source Satellite Remote Sensing

LI Linyuan (Beijing Forestry University, China)

A Comparative Study on the Impact of IFDI and OFDI on the Progress of Sustainable Development Goals

LI Chenggang, MENG Junjie (Guizhou University of Finance and Economics, China)

A New End-to-End Model for Water Body Extraction from SDGSAT-1 MII Imagery

DOU Peng (Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences, China)

The Role of Mangrove Ecosystems in Mitigating Systemic Risk and Promoting Climate Change, Socio-Economic Development, and Policy Synergies

GONG Mimi (Beijing Normal University, China)

Monitoring and Analysis of the Thermal Environment of Key Heat Sources in Beijing Using Thermal Infrared Images

LIN Songyi (Peking University, China)

CHOICE: Benchmarking the Remote Sensing Capabilities of Large Vision-Language Models

AN Xiao (Wuhan University, China)

Spatiotemporal Dynamics and Key Climatic Influences on Vegetation Resilience in Opencast Coal Mine Dumps After Restoration

WANG Hui (China University of Mining and Technology (Beijing), China)

Grid-scale Analysis of Heterogeneous Transboundary SDG Interactions using Earth Big Data

XUE Song (SZ-HK Collaborative Innovation Research Institute, The Hong Kong University of Science and Technology, China)

Incorporating biophysical boundaries into sustainability assessment across China's cities

MENG Chonghui (Zhejiang University, China)

MP-HSIR: A Multi-Prompt Framework for Universal Hyperspectral Image Restoration

WU Zhehui (Wuhan University, China)

Spatial Distribution and Pattern Analysis of Desert Vegetation Based on High-Resolution Airborne Imagery

MA Ruixue (Peking University, China)

Xinjiang Vegetation Alliances Mapping Using Deep Learning and Multi-Source Remote Sensing Data

DING Boyang (University of Chinese Academy of Sciences, China)

Land Cover Dynamics and SDG 15 Implications for World Heritage Protection in Okapi Wildlife Reserve

FAN Jinhui (International Research Center of Big Data for Sustainable Development Goals (CBAS))

Study on the Configuration of Water Conservancy Satellite Constellations for Watershed Monitoring

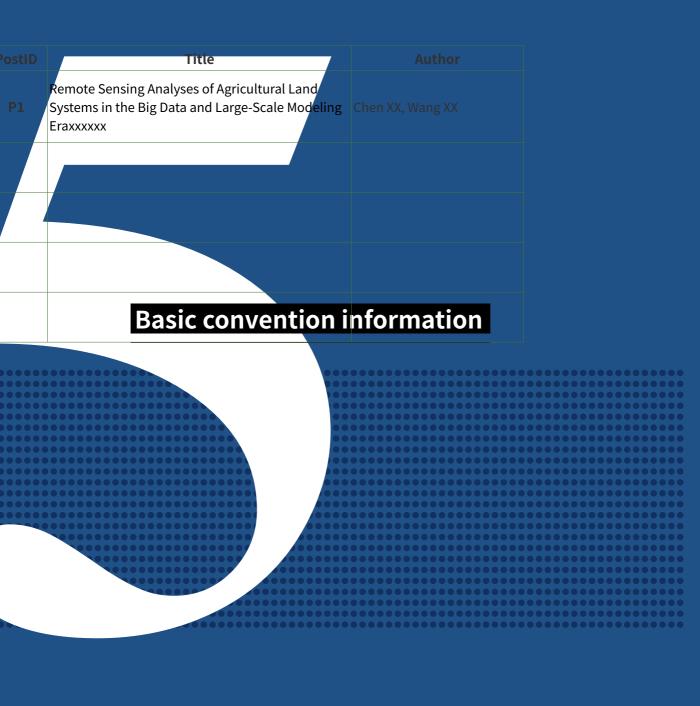
LIU Xinyu (Wuhan University, China)



Poster Session

Session will be held on the 3nd floor of the main venue, presented be present at 10:30-17:00 on 7th September.

PostID	Title	Author		
P1	Sustainable development assessment of large linear cultural heritage: A case study of the Shenmu section of Ming Great Wall	ZHANG Yin, HU Qingwu, ZHAO Pengcheng		
P2	Decoding the Impact of Extreme Weather on Aviation Safety and Economic Losses Using the SELENA-Net Deep Learning Model	GUO Manze, CAO Danni, PENG Yongxin, Bruce Janson		
Р3	Monitoring Vegetation Drought Stress and Estimating Crop Yield using BRDF-Corrected Sun-Induced Chlorophyll Fluorescence (SIF)	LI Ke, GAO Yongyuan, LI Zhihong, ZENG Yelu		
P4	Normalized Solar-Induced Fluorescence Responds Earlier Than Vegetation Indices to the 2019 North China Plain Drought	LI Ke, GAO Yongyuan, ZENG Yelu		
P5	Intelligent Classification and Resistance Analysis of Southern Corn Rust Severity by Integrating Graph Neural Network and Time Series Remote Sensing	WEI Yanan, ZENG Yelu		
Р6	High Winds Associated with Cold Surges and Their Climate Connections in the Yellow and Bohai Seas	ZHANG Xuecheng, SHI Luming, LIANG Bingchen		
P7	Extraction of Rubber Plantation Area Distribution and Disease Monitoring in China for Sustainable Production	WANG Donghua, YE Huichun		
P8	A Composite Neural Network Surrogate for Nested Numerical Modeling of Coastal Significant Wave Heights	TANG Menghan		
P 9	Application of fine spectral detection and quantitative analysis technology in water quality monitoring of the Yangtze River basin	ZHAO Yubo		
P10	Multimodal Sensing and Intelligent Computing Technology for Ecological Monitoring	JIAN Haifang		
P11	Achieving Climate Mitigation and Biodiversity Conservation: Synergy Assessment and Governance Pathways of China's Natural Forest Protection Policy	ZHAN Jinyan		
P12	A Deep Learning-Based Composite Agricultural Drought Index for Monitoring and Impact Assessment in Central Asia	XING Xiuwei		
P13	Extreme Drought Leads to Wolf Predation on Black-Necked Crane Nests in China's Yanchiwan National Nature Reserve	WANG Yifei		
P14	High-Precision Monitoring of Spartina alterniflora by Integrating Multi-Source Remote Sensing Data and Deep Learning Models	CHEN Gang		
P15	High-Precision Mapping for Forest Canopy Height Based on Multi- Modal Remote Sensing and Machine Learning	YI Ling		
P16	Construction of Cross-National Scale Terrestrial Ecosystem Risk Assessment and Security Early Warning System	HUANG Yuling		
P17	Assessment of land cover status and change in the world and "the Belt and Road" region from 2016 to 2020	YANG Aixia		



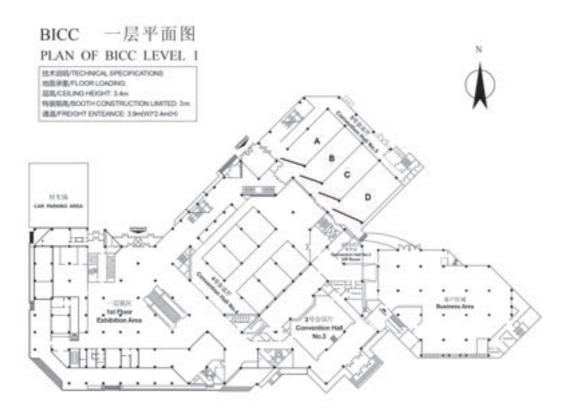
Convention Venue: Beijing International Convention Center Address: No. 8 Beichen East Road, Chaoyang District, Beijing

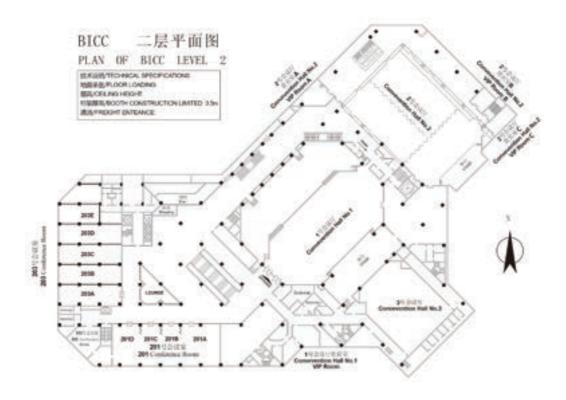
Beijing International Convention Center opened in 1990. Since its establishment, it has provided services for nearly 1,000 different international and domestic conventions and exhibitions every year.

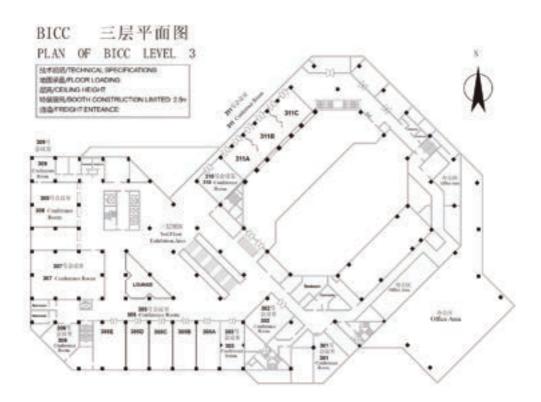
In 2002, the Convention Center was merged into Beijing North Star Industrial Group Co., Ltd., creating a stronger reputation with more effective management. The center is located in the bustling Asian Games Village in Beijing, combining a convention center, a commercial and shopping center and an entertainment venue. Located on the Fourth Ring Road in Beijing, it is only 20 kilometers away from the Beijing Capital International Airport and 9 kilometers away from the city center. The center is also very close to the central area of the Olympic Games, including the Bird's Nest (officially known as the National Stadium).

Beijing International Convention Center provides five-star service and has 48 different convention rooms. The exhibition hall of the center covers an area of 5,000 square meters. Beijing Continental Grand Hotel is a four-star hotel with 538 rooms and 5 restaurants serving different types of food, which is an ideal place to hold international and domestic conferences, display cultural events and hold business meetings.









Convention Secretariat

On September 6th, the Convention Secretariat was located in the VIP room of the first conference hall on the second floor of Beijing International Convention Center.

On September 7th-8th, the Convention Secretariat was located in Conference Room 305A on the third floor of Beijing International Convention Center.

Conference Sign-in

The on-site sign-in is located in the lobby on the first floor of Beijing International Convention Center. The opening hours are as follows:

Date of On-site Sign-in	Time for On-site Sign-in
September 6	08:00-17:00
September 7	08:30-17:00
September 8	08:30-17:00

Conference Pass

Registered representatives before September 5:

For the representative who has registered and paid fees, please sign in through the registered channel at the sign-in to get the representative card and conference materials.

For the representative who has registered but not paid fees, please pay the fees through the registered channel at the sign-in and sign in to get the representative card and conference materials then.

Please be sure to wear the representative card when entering the conference room.

Registered representatives on September 5 and the meeting site:

If you register on the day of the event, please scan and register through the unregistered channel at the sign-in, show the registration completion page and pay the conference registration fee. After the on-site staffs check that the information is correct, please sign in the sign-in form and get the representative card and conference materials.

Please be sure to wear the representative card when entering the conference room.

Conference Language

Opening Ceremony: Bilingual (Chinese and English)

Offline Branch: English

WiFi Network

The name of Beijing International Convention Center (BICC) free WiFi is "BICC WLAN". And you can log in with your mobile phone number to get free WiFi.



Transportation and Accommodation

Hotel Reservation

The following hotels are contract hotels for the conference. During the conference, due to the number of hotel rooms is limited, please reserve in advance. All reservations are subject to the confirmation of successful payment. Please illustrate that you will attend the conference upon payment for reservation.

- 1. Beijing Continental Grand Hotel
- 2. VIP Building of Huiyuan Apartment Hotel
- 3. Asian Games Village Hotel
- 4. National Convention Center Grand Hotel

Transportation and Surroundings

- (1) From the Beijing Capital International Airport to Beijing International Convention Center.
- a) Taxi. There is a taxi service at Beijing Capital International Airport and you can take a taxi to the conference venue. Taxi boarding location: outside Gate 1 on the first floor of Terminal 1.

Outside Gates 5-9 on the first floor of Terminal 2.

Terminal 3: Please follow the guiding signs inside the building.

The fare is about RMB120 (equal to USD20, including the highway toll fees), which varies with the traffic conditions.

b) Airport Shuttle

Take the Airport Shuttle Line 5 (terminus: Zhongguancun Station) and get off at Anhui Bridge Station of the Asian Games Village, then walk about 400 meters west to Beijing International Convention Center.

The faire is RMB24 (equal to USD4)

c) Airport Express

Take the airport express and get off at Dongzhimen Station, and then take Bus No. 2 and get off at Anhui Bridge North Station.

Take the airport express and get off at Sanyuan Bridge Station, then transfer to Metro Line 10 to Beitucheng Station, and then transfer to Metro Line 8 and get off at the Olympic Sports Center Station.

- (2) From the railway station to Beijing International Convention Center
- A) From Beijing Railway Station to Beijing International Convention Center

Take Metro Line 2 and get off at Gulou Street Station, and then transfer to Line 8 and get off at the Olympic Sports Center Station.

Take Metro Line 2 and get off at Yonghegong Station, and then transfer to Line 5 and get off at the Huixin West Street North Exit Station.

Take bus No. 2 and get off at Anhui Bridge North Station.



b) Departing from Beijing West Railway Station

Take Metro Line 9 and get off at Baishi Bridge South Station, then transfer to Line 6 and get off at Nanluogu Alley, Subway Station, and then transfer to Line 8 and get off at Olympic Sports Center Station.

Take bus No.387 and get off at Anhui Bridge North Station.

c) Departing from Beijing South Railway Station

Take Metro Line 14 and get off at Puhuangyu Station, then transfer to Line 5 and get off at the Huixin West Street North Exit Station, and then transfer to Bus No.983/658/386/490 and get off at the Asian Games Village Station.

Take Metro Line 4 Daxing Line and get off at Xuanwumen Station, then transfer to Line 2 and get off at Gulou Street Station, and then transfer to Line 8 and get off at Olympic Sports Center Station.

Take Metro Line 4 Daxing Line and get off at Ping'anli Station, then transfer to Line 6 and get off at Nanluogu Alley Station, and then transfer to Line 8 and get off at Olympic Sports Center Station.

Remarks:

- 1. Due to the need for taking public transportation in RMB, you can exchange the money at the bank or foreign currency exchange counter at the airport in advance.
- 2. If you take the airport shuttle, airport express or subway to Beijing International Convention Center, there will be many uphill and downhill slopes or stairs on the way. We have received comments on the inconvenience of taking the airport express and subway in previous events, therefore, we suggest that you take a taxi to Beijing International Convention Center.

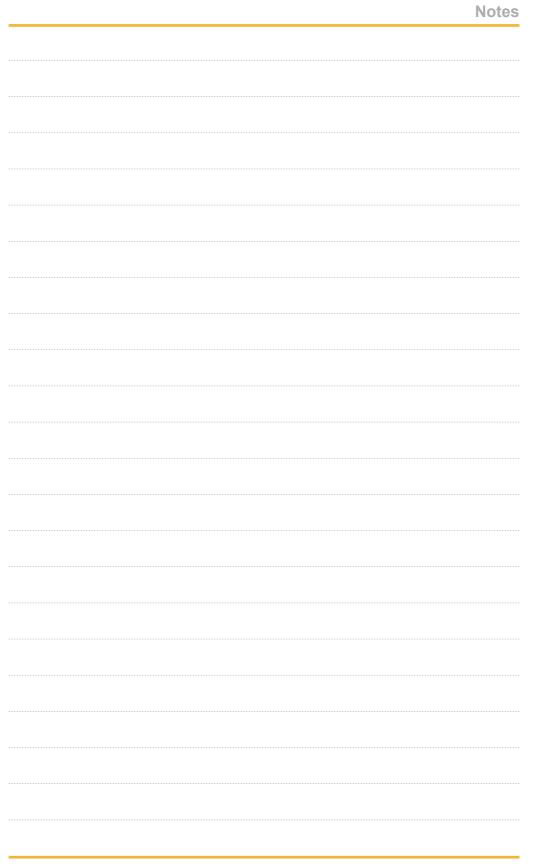


Conference Meals

Buffet will be provided during the conference. On September 6th, 7th and 8th, please enjoy the buffet with the meal vouchers, in the Ballroom on the second floor of Beijing Continental Grand Hotel.

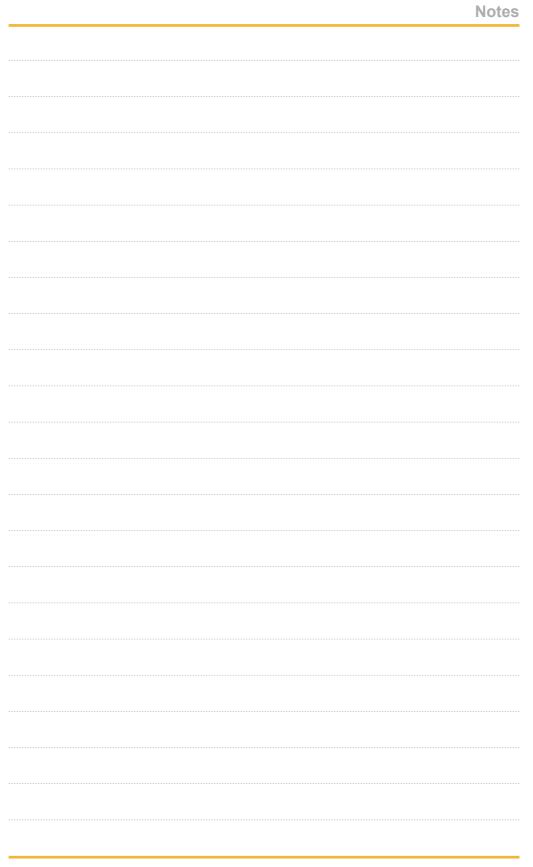
Safety of Goods in the Venue

The Forum Secretariat will not be responsible for the damage or loss of your personal safety and personal belongings. Please take your personal valuables with you at any time during the conference.



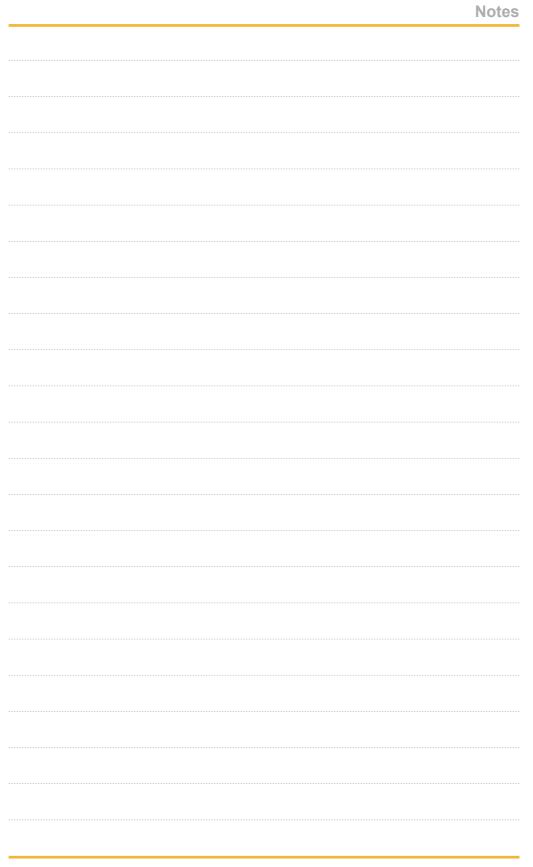


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The 5th International Forum on Big Data for Sustainable Development Goals (FBAS 2025)



Secretariat of the 5th International Forum on Big Data for Sustainable Development Goals (FBAS 2025)

Website: https://www.fbas.org.cn/fbas2025/en/index/index.html

Email: fbas@cbas.ac.cn Tel.: +86 10 82178356