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International Forum on Big Data for Sustainable Development Goals

Theme: Big Data for Implementing the Sustainable Development Goals

Conference Form: Online & Onsite

6-8 September, 2021 Beijing, China

Hosted by



Chinese Academy of Sciences (CAS)



United Nations Environment Programme (UNEP)



United Nations Convention to Combat Desertification (UNCCD)

Organized by



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



Aerospace Information Research Institute (AIR), CAS



Big Earth Data Science Engineering Program (CASEarth)

Sponsored by



(Listed in no particular order)
China Association for Science and Technology



(CAST)



National Natural Science Foundation of China (NSFC)



The Alliance of International Science Organizations (ANSO)



Group on Earth Observations (GEO)



Committee on Data of the International Science Council (CODATA)



International Society for Digital Earth (ISDE)



Integrated Research on Disaster Risk (IRDR)





International Center on Space Technologies for Natural and Cultural Heritage, under the auspices of UNESCO (UNESCO HIST)



Digital Belt and Road Program (DBAR)

Co-organized by

(Listed in no particular order)

- Chinese National Committee of ISDE
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- IRDR China National Committee (IRDR CHINA)
- Key Laboratory of Earth Observation of Hainan Province
- Ohina Centre for International Science and Technology Exchange
- © CAST UN Consultative Committee on Disaster Risk Reduction
- University of Chinese Academy of Sciences
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- Bulletin of Chinese Academy of Sciences

Welcome Message

The United Nations 2030 Agenda for Sustainable Development entered its "Decade of Action" in 2020. However, its implementation still faces several constraints such as lack of data, insufficient research on indicator systems, and uneven progress in its implementation. Among these, the need for data and methods is the most important and urgent.

Scientific and technological innovations play an important role in providing solutions to several of these challenges. Therefore, the United Nations initiated the "Technology Facilitation Mechanism" (TFM) to promote and improve technological and scientific support for policy interventions and decision support systems towards achieving sustainable development goals. China in recent years has increased its reliance on science, technology, and innovation to promote economic and social development and is implementing new strategies which are consistent and complementary to its commitments to the UN Sustainable Development Goals. One of the key avenues within China's strategy is to improve its capacity to analyze and utilize data for scientific and technological progress through a strong focus on research on big data and its integration with data from different natural and social science domains. This encompasses land, ocean, atmosphere, urban settlements, and human activity and holds immense potential for new solutions towards sustainable development goals. UN Secretary-General has also emphasized better use of data, and harnessing science, technology, and innovation with a greater focus on digital transformation.

During his address at the 75th UN General Assembly on 22 September 2020, Chinese President Xi Jinping announced that China will set up an International Research Center of Big Data for Sustainable Development Goals to support the implementation of the United Nations 2030 Agenda for Sustainable Development. The Centre aims to be a public science and technology platform for big data for sustainable development, a center for scientific research on sustainable development, a hub for innovations in data information services and technologies, a high-end think tank on sustainable development, and a center for developing talent and improving human capacity through education and training. Through these roles, the Center will serve UN agencies and UN Member States in implementing the 2030 Agenda.

The Center will be officially inaugurated on 6 September 2021, and to mark this important occasion, the International Forum on Big Data for Sustainable Development Goals (FBAS) will be held in Beijing, China, from 6 to 8 September 2021. The theme of the forum is "Big Data for Implementing the Sustainable Development Goals", with a special focus on building a digital silk road and global partnership for Sustainable Development Goals, innovation and demonstration of big data applications for sustainable development, cutting-edge technologies and information platforms for assessing Sustainable Development Goals, Digital Earth and sustainable development, and Big Earth Data to support Sustainable Development Goals.

I would like to warmly welcome experts, scholars, engineers, managers and other stakeholders from all over the world to join us at this forum. We look forward to sharing the latest achievements, scientific exchanges, and exploring future cooperation with all participants.

We look forward to meeting you physically in Beijing or virtually at the 1st FBAS during the golden autumn to discuss the bright future of big data for global sustainable development goals.

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Co-Chairs of the International Forum on Big Data for Sustainable Development Goals



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



Alessandro ANNONI International Society for Digital Earth

Organization

Honorary Chair

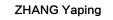


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Agenda

The conference will feature keynote speeches, invited talks, special reports and, seminars.

	September 6		September 7			September 8	
	Opening Ceremony & Inauguration Ceremony of CBAS		Keynote Session II		Keynote Session III	HIST 10th	
Morning	Tea Break						Anniversary
	Keyno	te Session I	Forum o	n Earth Observation	n for SDGs	Big Earth Data to support SDGs	Symposium
	Lunch						
	Building a digital silk road and global partnership for SDGs	Cutting-edge technologies and information platforms for assessing SDGs	Innovation and demonstration of big data application for sustainable development	Digital Earth and sustainable development	DBAR Science Team Meeting (Invited)	Research on big Earth data to support sustainable development goals	
Afternoon	Tea Break						
	Building a digital silk road and global partnership for SDGs	Cutting-edge technologies and information platforms for assessing SDGs	Innovation and demonstration of big data application for sustainable development	Digital Earth and sustainable development	DBAR Science Team Meeting (Invited)	Closing Ceremony	

Keynote Speakers



Daya REDDY
President of the
International Science
Council (ISC)



GONG Ke President of the World Federation of Engineering Organizations (WFEO)



(Listed in no particular order)

LIU Jian
Director of the Science
Division, UN Environment
Programme (UNEP)



Dirk FRANSAERManaging Director of VITO



David CASTLE
Professor at the University
of Victoria, and Research in
Residence at the Office of
the Chief Science Advisor to
the Prime Minister of Canada



Massimo MENENTI Member of the DBAR Science Committee, Professor at the Delft University of Technology



Markku KULMALA
Professor at University of
Helsinki, Foreign Member of
Chinese Academy of
Sciences



Clovis FREIRE
Economist at the Division on
Technology and Logistics of
the United Nations
Conference on Trade and
Development (UNCTAD)



Gretchen KALONJI Dean of the Institute for Disaster Management and Reconstruction (IDMR)

Academic topics

(1) Building a digital silk road and global partnership for sustainable development goals

- ◆ Agriculture and Food Security
- ◆ Big Earth Data for Sustainable Development and Management of Coast and Sea
- ◆ Activities around Belt and Road from Scientific Data Center
- ◆ Big Earth Data for Disaster Risk Reduction and Sustainable Development Goals
- ◆ Environmental Dimension of SDGs
- ◆ Big Earth Data for Sustainable Development in High Mountain Asia and Arctic Region
- ◆ Big Earth Data and Sustainable Cities
- ◆ Water Resource Security and Efficient Utilization under Global Change

(2) Cutting-edge technologies and information platforms for sustainable development goals assessment

- ◆ Digital Heritage and Sustainability
- ◆ Hyperspectral Earth Observation
- ◆ Frontier Technology of Microwave Earth Observation
- ◆ Virtual Geographic Scenario and Digital Twin
- ◆ Big Space Earth Data
- ◆ Hyperspectral LiDAR Technology and Application
- ◆ Applications of Earth Observation Technology for Energy and Environment
- ◆ BIM/CIM Information Model and Virtual Geographic Environment System
- ◆ LiDAR Earth Observation

(3) Innovation and demonstration of big data applications for sustainable development

- ◆ Big Earth Data in Support of SDG 2: Zero Hunger
- ◆ Big Earth Data in Support of SDG 6: Clean Water and Sanitation
- ◆ Big Earth Data in Support of SDG 11: Sustainable Cities and Communities
- ◆ Big Earth Data in Support of SDG 13: Climate Action
- ◆ Big Earth Data in Support of SDG 14: Life Below Water
- ◆ Big Earth Data in Support of SDG 15: Life on Land
- ◆ Big Earth Data in Service of SDGs: Trade-offs and Synergies

(4) Digital Earth and sustainable development

- ◆ Digital Agriculture and Food Security
- ◆ Digital Mountain for Mountain Sustainable Development
- ◆ Digital Earth Poles and SDGs
- ◆ Digital Ocean Supporting for Sustainable Ocean Development
- ◆ Digital Disaster Reduction Technology for Sustainable Development

(5) Research on Big Earth Data to support sustainable development goals

- ◆ Big Data Curation and Cloud Computing for SDGs
- ◆ Big Earth Data for Building Beautiful China
- ◆ Biodiversity Big Data Mining and Protection Application
- ◆ Ocean Big Data in Support of the Sustainable Development Goals
- ◆ Big Earth Data to Support the UN Sustainable Development Goals in the Earth's Three Poles
- ◆ Digital Earth Technology System and Global Basic Spatial Information Products
- ◆ Big Earth Data: A New Power to Support the Sustainable Development Goals

Conference Proceedings Publication

The oral and poster presentations can be expanded to a full length article (English) for publication. After peer-review, the accepted articles could be published in the Proceedings of the 2nd CDEC (IOP publishing, EI, Web of Science) after careful revision. The full article publication will entail additional publication charges.

Selected high quality articles will be recommended for publication in the International Journal of Digital Earth (SCI) and the Big Earth Data (ESCI).

Important Dates

Online Registration Deadline September 4, 2021

Full Paper Submission Deadline August 20, 2021

On-Site Registration September 6-8, 2021

Conference Exhibition

In conjunction with the forum, 'Exhibition on Big Earth Data Facilitating the Monitoring and Evaluation of SDGs' will be held. With the theme of 'Science, Technology and Innovation Facilitates the United Nations 2030 Agenda for Sustainable Development', the exhibition will show 100 cases of Big Earth data supporting SDGs, the world's first SDG scientific satellite, comprehensive demonstration of big data promoting SDGs, public products of SDGs monitoring and evaluation, etc., with a view to presenting the application value and prospect of Big Earth data technology and methods in monitoring and evaluating SDGs, and making due contributions to the realization of SDGs.



Accommodation and Traffic

The forum will be held in Beijing International Convention Center. Please pay attention to the following hotel reservation and transportation information.

Hotel booking

The following hotels have agreed to reserve rooms for guests during the forum. Please book early due to the limited number of rooms in the hotel. All bookings are subject to successful confirmation of payment. Please indicate that you will attend this forum when booking the payment.

- (1) Beijing Continental Grand Hotel
- (2) North Star Huiyuan Prime Hotel
- (3) North Star Yayuncun Hotel
- (4) China National Convention Center Grand Hotel

Traffic and surroundings

Beijing International Convention Center is located in the northeast of the intersection of Beichen East Road and North Fourth Ring Road. It is located in the Asian Olympic business district, adjacent to the National Olympic Sports Center and National Stadium (Bird's Nest), overlooking the Olympic venues in the north and the main road of the Fourth Ring Road in the south.

On-line Conference Guideline

ZOOM Webinars for all academic sessions are available during the International Forum on Big Data for Sustainable Development Goals. Attendees could enter these on-line conferences through the Forum Agenda column.

If you are one of the presenters of your session, please refer to your academic task letter and enter your webinar through the Panelist channel. This guideline will help all the attendees enter the webinar through the attendee channel.

The forum website will check if you have registered or not before you enter the webinar. Please make your registration first if you have not finished this process.

Step 1. Enter the Agenda page from our official website.

https://fbas2021.scimeeting.cn/en/web/index/

Step 2. Select your interested session and click on "Enter Conference"

Step 3. If you do not login your account before you enter the Forum Agenda, the website will turn to the login page. Please log in your account and re-select your webinar channel.

Step 4. Enter the ZOOM Webinar through the attendee channel.

Live Broadcast Information

The opening ceremony and Keynote Presentations of the International Forum on Big Data for Sustainable Development Goals are free for all audiences. You could watch these events through our official website.

- ◆ You could click on the Watch live button to enter the broadcast.
- ♦ If you have finished the registration of FBAS 2021, you could also enter the live broadcast through the personal center.

Note: All live entrances will be available at **08:00 AM Beijing Time (UTC+8) on September 6**.





Contact Us:

Secretariat Email: fbas2021@aircas.ac.cn Conference Website: https://fbas2021.scimeeting.cn/