

ISPRS–ISDE 2025 Conference Successfully Held in Nairobi, Kenya (2–4 December 2025)

The joint **International Society for Photogrammetry and Remote Sensing (ISPRS) Conference on Geo-digitization for Sustainable Development Goals (SDGs) and 3rd Youth Innovation Forum of Digital Earth** has concluded successfully in Nairobi. With the theme **“Geo-Digitization for Sustainable Development Goals,”** the event brought together more than 100 pioneering thinkers, experts and practitioners from over 15 countries and regions. As a key global platform for young scientists, the 3rd Youth Innovation Forum enabled open exchange on emerging geospatial technologies and new opportunities in geo-digitization. This year also marked the Forum’s first time in Africa, opening new avenues for strengthening South–South cooperation.



Group photo of participants at the ISPRS-ISDE 2025 Conference opening Ceremony

The ISPRS-ISDE 2025 Conference was jointly organized by **ISPRS**, the **International Society for Digital Earth (ISDE)** and **KCA University (Kenya)**, and co-organized by the **ISDE Young Scientist Innovation Network**, ISPRS Working Groups and partner institutions.

Opening Ceremony

On 2 December, **Dr. Simon Mwendia**, Dean of the School of Technology at KCA University and **Prof. Lucy Waruguru**, Dean of Research, Innovation & Outreach and Chair of the Conference, delivered the welcome remarks. **Prof. Vincent Onywera**, Deputy Vice-Chancellor at KCA University and **Dr. Changlin Wang**, Vice President of ISDE, delivered the opening addresses.



Opening remarks by Prof. Lucy Waruguru and Dr. Changlin Wang (Vice President, International Society for Digital Earth)

Mr. Weldon Maritim, Director of Survey at the Ministry of Lands and Physical Planning of Kenya, addressed the Forum on behalf of **H.E. Nixon Korir**, Principal Secretary of the Ministry. **Prof. Isaiah I. C. Wakindiki**, Vice-

Chancellor and CEO of KCA University, conveyed his greetings in a written message.

Mr. Maritim emphasized the strong momentum geospatial technologies provide for innovation, noting their role in transforming governance, guiding policy planning, understanding ecological processes and enhancing equitable access to public services. He highlighted public trust and transparency as foundations of responsible governance and expressed the Ministry's readiness to deepen collaboration with both ISPRS and ISDE.

Dr. Wang reviewed the close partnership between ISPRS and ISDE since the signing of their 2022 Memorandum of Understanding, emphasizing that this joint Forum exemplifies the success of that collaboration. He underscored the transformative potential of Digital Earth technologies in accelerating SDG progress at global, regional and local scales and reaffirmed ISDE's commitment to strengthening cooperation with African scientists and institutions.

Keynote Speeches

Following the opening ceremony, **Prof. Jianya Gong**, Member of the Chinese Academy of Sciences and Professor at Wuhan University, delivered a keynote titled **"High-Accuracy Real-Time Intelligent Remote Sensing Satellite**

Technologies and Applications.” He analyzed limitations in current satellite remote sensing workflows, highlighted the need for real-time systems and introduced the progress of **“Oriental Eye,”** an intelligent real-time remote sensing satellite constellation jointly developed by Wuhan University and Shandong Province.

Two additional keynotes followed:

- **3 December — Prof. Alexander Zipf**, Chair of the GIScience Research Group at Heidelberg University and Director of HeiGIT, presented **“The Potential of Volunteered Geographic Information (VGI) for Geo-Digitalisation for Sustainable Development: Harnessing OpenStreetMap & GeoAI for Humanitarian Aid & Climate Action.”**
- **4 December — Dr. Waswa Rose**, Programme Manager at RCMRD, representing Director General **Dr. Emmanuel Nkurunziza**, delivered **“The Role of Modern Land Administration Systems in Advancing SDGs in African Countries.”**



Mr. Weldon Maritim (Director of Surveys), Prof. Hongchao Fan (Conference Chair) and Prof Alexander Zipf (Keynote speaker) among conference participants

Workshops, Technical Sessions and Field Activities

The Forum hosted a diverse range of thematic workshops covering geospatial science, artificial intelligence, disaster risk reduction, AI-assisted epidemic response and urban resilience mapping using UAVs and OpenStreetMap. Activities combined indoor technical sessions with outdoor field mapping exercises. A post-conference workshop on 5 December focused on practical cartography and automated 3D building data generation, offering young researchers hands-on experience and fostering interdisciplinary collaboration.



ISPRS-ISDE 2025 Organizing Committee members with sponsors and partners

The conference received **62 submissions**, with **55 abstracts** presented across **nine parallel sessions** and **four thematic workshops**. A dedicated half-day training session introduced participants to **SAR interferometry for**

deformation monitoring. Presentation topics included urban sensing and smart governance, GeoAI and data infrastructure, atmospheric and emissions monitoring and geospatial solutions for sustainable resource management.

Young Scientist Awards

To recognize outstanding innovation among early-career researchers, the **ISDE Young Scientist Award** was presented to **Prof. Luo Wei** (National University of Singapore) and **Prof. Cao Kai** (East China Normal University).

Best Paper Award

The conference awarded the **Best Paper Award** based on the evaluation and recommendations provided by the reviewers. The awarded papers are: *“Buddhist Face Segmentation with 3D Point Clouds”* by **Yuehan Pan et al.**; *“Assessing Large-Scale Healthcare Resource Accessibility Using Remote Sensing and Geospatial Analysis: A Case Study of Wildfire-Exposed Regions in Africa”* by **Ling Hu et al.**; and *“Exploring Our Planet from Space: How Learners Can Help Protect the Earth Using Google Earth Engine”* by **Martin Wainaina Chege et al.**

The winners of the Best Paper Award will receive a publication waiver for the Journal of Geo-spatial Information Science valued at USD 2,200