

Gi4DM 2022 & Urban Geoinformatics 2022 Report

The hybrid conference *ISPRS International Conference on Geo-Informatics Supported Disaster Risk Reduction & Smarter Urban Management (Gi4DM 2022 & Urban Geoinformatics 2022)* was held from 1-3 November 2022 in Beijing, China. The conference was hosted by the Beijing University of Civil Engineering and Architecture (BUCEA), and supported by the Chinese Society for Geodesy Photogrammetry and Cartography (CSGPC), China Association for Geospatial Industry and Sciences, GNSS & LBS Association of China, China Centre for International Science and Technology Exchange, Beijing International Science and Technology Exchange Center, International Science Council Geo-Unions Standing Committee on Disaster Risk Reduction, UN-GGIM Academic Network, National Earth Observation Data Center.

PIESAT Information Technology Co., Ltd. sponsored the conference.



The conference focused on the two topics “Disaster Risk Reduction” and “Urban Management”. Since 2005, ISPRS has organized 13 “International Conferences on Geo-Information for Disaster Management (Gi4DM)” around the world. This Gi4DM 2022 is the 14th edition and the 2nd time in China following Gi4DM 2008. The Urban Geoinformatics 2022 provided a platform to discuss and exchange ideas on the method, technology, and application of remote sensing and geo-information technology in the urban field.

More than 200 experts, scholars, and students from 11 countries and regions attended the conference, including China, Turkey, Germany, Australia, Canada, Netherlands, New Zealand, Italy, the Philippines, Serbia, and Japan.

The President of CSGPC and Vice President of BUCEA attended the opening ceremony and delivered their welcome addresses. Professor JIANG Jie, Secretary General of ISPRS, introduced the development history, working purpose, organizational structure, and key work plan of ISPRS for her term from 2022 to 2026, as well as the ways and means for Chinese scientific and technical personnel to participate in ISPRS activities.

After the opening ceremony, three plenary sessions were held, in which nine experts active in this field were invited to give keynote speeches. The excellent reports provided a high-end academic feast for the audience.



KEYNOTES

	Role of International Scientific Unions in support of the Sendai Framework and Improved Societal Well-being		Smart Campus Management using an Integrated Digital Twin		Reflections on the losses caused by earthquake in Maduo, Haibei and Delingha of Qinghai Plateau
	Quantitative and Qualitative Monitoring of Weather using Polarimetric and Doppler Weather Radars		Spatial Digital Twins for Emergency Response		Digital Twins Applications
	Data Science in Urban Geoinformatics: Challenges and Future Applications		Structural Assessment and Safety Control for Ancient Buildings in Historical Cities		Pandemic Analytics During the COVID-19 Crisis

The conference received 108 submissions, with 40 full-paper-peer-reviewed papers and 33 abstract-reviewed papers accepted and published in ISPRS proceedings. The conference arranged four Gi4DM sessions (24 oral presentations) and five Urban Geo-Info sessions (30 oral presentations). The speakers presented the latest research achievements, shared their successful experiences, and discussed future research plans.



In cooperation with relevant academic organizations and scientific research institutions, the conference organized three special sessions. Among them, the “Open Science Approaches for DRR” was jointly initiated and organized with the ISC Geo-Unions Standing Committee on Disaster Risk Reduction. Experts from IRDR, CODATA, UNESCO, and UNDRR were invited to give presentations. The jointly prepared Policy Brief on “Approaches and Challenges: Open Science for DRR” was reviewed in the session.

The “One-stop Remote Sensing Big Data Online Services” session was jointly initiated and organized by PIESAT Information Technology Co. Ltd., Capital Normal University (CNU), and BUCEA. The R&D and application progress of the one-stop remote sensing big data online analysis platform PIE-Engine, Wukong cloud platform, and online surveying and mapping technology training platform for earth observation were presented.

The “Ecological Environment Monitoring to Urban Areas along China-Europe Railway” session was jointly initiated and organized by BUCEA and the University of Novi Sad, Serbia. Based on the joint project on “AI-Based Remote Sensing Monitoring of Urban Ecological Environment along the China-Europe Railway Express”, the two sides presented and exchanged their research progress. Experts from Wuhan University and the Chinese Academy of Sciences were invited to introduce the research progress of long-lived, large-scale remote sensing interpretation products and global high-frequency vegetation cover data products.

Jiang Jie, BUCEA, China

Sisi Zlatanova, ISPRS TC IV, Australia

Orhan Altan, ISC GeoUnion Standing Committee on DRR, Turkey

Songnian Li, UN-GGIM Academic Network, Canada