



**ISPRS and GEO Workshop on  
Geospatially-enabled SDGs Monitoring for the  
2030 Agenda (GI4SDGs)**

**Programme Book**

**November 19-20, 2019**

**Fenglin Hotel, Changsha, Hunan, China**

## Organizing Committees

### Co-Chairs

Xiaoguang Zhou	Central South University, China/ISPRS WG IV/4, Co-chair
Hao Wu	National Geomatics Center of China, China/ ISPRS ICWG IV/III, Chair
Maria Antonia Brovelli	Politecnico di Milano, Italy/ISPRS WG IV/4, Chair

### Members

Yifang Ban	KTH Royal Institute of Technology, Sweden
Jun Chen	National Geomatics Center of China, China/ISPRS 1st Vice President
Cidália Costa Fonte	University of Coimbra, Portugal/ISPRS WG IV/4, Co-chair
Dongyang Hou	Central South University, China/ISPRS ICWG IV/III, Secretary
Ivana Ivánová	Curtin University, Australia/ISPRS ICWG IV/III, Co-chair
Jie Jiang	Beijing University of Civil Engineering and Architecture, China/ISPRS TC III President
Songnian Li	Ryerson University, Canada/ISPRS Treasure
Jonathan Philip Mills	Newcastle University, UK
Marco Minghini	European Commission - Joint Research Centre, Italy/ISPRS WG IV/4, Secretary
Lixin Wu	Central South University, China
Xuesheng Zhao	China University of Mining and Technology, China
Sisi Zlatanova	University of New South Wales, Australia/ISPRS TC IV President

### Organizers

- ISPRS ICWG IV/III: Global mapping: updating, verification and interoperability
- ISPRS WG IV/4: Collaborative Crowdsourced Cloud Mapping (C<sup>3</sup>M)
- GEO Community Activity: Land Cover and Land Cover Change
- School of Geosciences and Info-Physics, Central South University, Changsha, China
- National Geomatics Center of China (NGCC)

# Programme

## ISPRS and GEO Workshop on

### Geospatially-enabled SDGs Monitoring for the 2030 Agenda (GI4SDGs)

November 19-20, 2019, Changsha, China

Location: 3rd meeting room (3rd floor)

Monday, 18 November 2019	
14:00 - 22:00	Registration
Tuesday, 19 November 2019	
8:30 - 9:10	<b>Opening</b> <b>Chair: Prof. Xiaoguang Zhou, Central South University/ISPRS WG IV/4 Co-chair</b> Welcome address by CSU representative, Xuehong Zhu, Vice President of CSU, CN Welcome address by Prof. Lena Halounova, ISPRS Secretary General, CZ <b>Group Photo</b>
9:10 - 10:30	<b>Keynote Session</b> <b>Chair: Prof. Maria Antonia Brovelli, Politecnico di Milano /ISPRS WG IV/4 Chair</b> <ol style="list-style-type: none"><li>1. Transformation from Human Needs to SDGs, Prof. Orhan Altan, Istanbul technical University, TR</li><li>2. International Perspectives on Earth Observations - Delivering the SDGs, Dr. Barbara Ryan, Group on earth observation, USA</li><li>3. Geospatially-enabled SDG monitoring for supporting the united nation's 2030 agenda, Prof. Jun Chen, National Geomatics Center of China, CN</li></ol>
10:30 - 10:50	Tea/Coffee break
10:50 - 12:10	<b>Technical Session1: Monitoring SDGs with Geospatial Information</b> <b>Chair: Prof. Sisi Zlatanova, University of New South Wales/ ISPRS TC IV President</b> <ol style="list-style-type: none"><li>1. The UKRI GCRF water security and sustainable development hub and the role of geospatial information, Prof. Jon Mills, Newcastle University, UK</li><li>2. SIMILE, a geospatial enabler of the monitoring of Sustainable Development Goal 6</li></ol>

	<p>(Ensure availability and sustainability of water for all), Prof. Maria Antonia Brovelli, Politecnico di Milano, IT</p> <ol style="list-style-type: none"> <li>SDG local monitoring: China's Pilot project, Shu Peng, National Geomatics Center of China/UN-GGIM-AP WG3: Integrating Geospatial Information and Statistics, Vice-Chair, CN</li> <li>Big geospatial data for SDGs, Prof. Songnian Li, Ryerson University, CA</li> </ol>
12:10 - 14:00	<b>Lunch (Location: Ziqidonglai Hall, Fenglin Hotel)</b>
14:00 - 15:40	<p><b>Technical Session 2: Geospatial Information Extraction</b></p> <p><b>Chair: Prof. Hongrui Zhao, Tsinghua University</b></p> <ol style="list-style-type: none"> <li>Mapping in Smart Cities: Crowdsourcing by Autonomous Vehicles, Prof. Charles K Toth, Ohio State University, USA</li> <li>Estimating aboveground biomass of bamboo and mixed bamboo forest in Thua Thien-Hue Province, Viet Nam using PALSAR-2 and Landsat OLI data, Dr. Cat Tuong Truong Thi, Vietnam Academy of Science and Technology, VN</li> <li>Semantic classification of urban buildings using deep learning and VGI information, Dr. Wenzhi Zhao, Beijing Normal University, CN</li> <li>Cross analysis and integration of three new benchmark datasets for remote sensing image retrieval, Dr. Dongyang Hou, Central South University, CN</li> <li>African land cover validation with LSI sampling approach, Dr. Fei Chen, East China University of Technology, CN</li> </ol>
15:40 - 16:00	<b>Tea/Coffee break</b>
16:00 - 17:20	<p><b>Technical Session 3: Geospatial Information Modelling and Analysis</b></p> <p><b>Chair: Prof. Lixin Wu, Central South University</b></p> <ol style="list-style-type: none"> <li>A geo-database solution for the management and analysis of building model with multi-source data fusion, Prof. Sisi Zlatanova, University of New South Wales, AU</li> <li>FAIR and standard access to spatial data as the means for achieving sustainable development goals, Dr. Ivana Ivánová, Curtin University, AU</li> <li>From SDGs monitoring to decision making---Deqing's three year action plan, Dr. Hao Chen, Hunan University of Science and Technology, CN</li> <li>Understanding the travel behaviors and activity patterns of vulnerable population using smart card data: An activity space-based approach, Dr. Shanqi Zhang, Nanjing University, CN</li> </ol>

17:20 - 18:30	<p><b>Discussion (Chair: Prof. Songnian Li and Prof. Jon Mills)</b></p> <p>ISPRS Scientific Programme on Geo-information for SDGs: Framework and implementation</p>
18:30 - 20:00	<p><b>Welcome Dinner (Location: Ziqidonglai Hall, Fenglin Hotel)</b></p>
<p><b>Wednesday, 20 November 2019</b></p>	
8:30 - 10:00	<p><b>Student Session 1</b></p> <p><b>Chair: Dr. Ivana Ivánová, Curtin University /ISPRS ICWG IV/III, Co-chair</b></p> <ol style="list-style-type: none"> <li>1. Extraction methods and experiment on essential forest variables for geospatially-enabled SDGS monitoring, Yijing Zhao, China University of Mining and Technology, CN</li> <li>2. Examining multi-level poverty-causing factors of farm households, Yuewen Jiang, Capital Normal University, CN</li> <li>3. An improved pixel counting method for arbitrary zonal statistics on GlobeLand30, Xu Chen, China University of Mining and Technology, CN</li> <li>4. Measuring regional progress towards SDG3 with geospatial and statistical information- a case study of Deqing, Qianwen Wang, China University of Mining and Technology, CN</li> <li>5. A method of building detection in remote sensing images based on deep learning with multiple lightness detectors, Dongming Huang, Tsinghua University, CN</li> <li>6. Quantifying effects of changing spatial scale on spatial entropy index: use of fractal dimension, Chaojun Wang, Tsinghua University, CN</li> </ol>
10:00 - 10:20	<p><b>Tea/Coffee break</b></p>
10:20 - 11:50	<p><b>Student Session 2</b></p> <p><b>Chair: Prof. Xuesheng Zhao, China University of Mining and Technology</b></p> <ol style="list-style-type: none"> <li>1. Comparison and analysis of the accuracy of GEE platform pixel-based supervised classification-taking Shandong province as an example, Chenlin Jia, China University of Mining and Technology, CN</li> <li>2. Research on information acquisition and accuracy analysis of ancient architecture plaque with common smart phone, Xiao Pan, Beijing University of Civil Engineering and Architecture, CN</li> <li>3. Monitoring the spatio-temporal trajectory of urban area hotspots in Wuhan, China using time-series nighttime light images, Yuling Ruan, Central South University, CN</li> </ol>

	<p>4. Study on extraction and expression methods of bulging diseases in ancient city walls, Qing Song, Beijing University of Civil Engineering and Architecture, CN</p> <p>5. Research on the factors affecting the accuracy of three-dimensional reconstruction model of Rotor UAV archaeological sites, Xin Zheng, Beijing University of Civil Engineering and Architecture, CN</p> <p>6. An approach for evaluating the information content of remote sensing images, Shimin Fang, Central South University, CN</p>
8:30 - 11:30	<p>Business meeting on Joint project application on GEO4SDGs (invited only)</p> <p><b>Location: meeting room A (eighth floor)</b></p>
11:50 - 12:20	<p><b>Closing</b></p> <p><b>Chair: Dr. Hao Wu, National Geomatics Center of China/ISPRS ICWG IV/III</b></p> <p><b>Chair</b></p>
12:20 - 14:00	<p><b>Lunch (Location: Ziqidonglai Hall, Fenglin Hotel)</b></p>

## Accommodation

The Workshop will be held in the Fenglin Hotel in Changsha, the capital city of Hunan Province. The hotel located at the foot of the Yuelu Mountain and close to the Yuelu Academy and Autumn-Admiring Pavilion. As a “thousand-year academy”, The Yuelu Academy was one of the four ancient Chinese academies. The Late-Autumn-Admiring Pavilion is one of the four famous pavilions of China.

The hotel is located at: No. 43, Fenglin 1st Rd., Changsha, China (长沙市岳麓区枫林一路 43 号). Please check out the workshop website for directions.



## Catering

Registered participants will be provided with lunches, dinner, as well as morning and afternoon coffee breaks. In the evening of Tuesday, December 19, 2019, workshop participants are invited to attend a reception dinner hosted by the Central South University.

## Workshop Website

<http://www.geoinfobar.com/GI4SDGS/index.html>

## Contact

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## How to get to the Fenglin Hotel?

### ➤ From Huanghua International Airport

- By taxi: about 100 Yuan RMB, 50 minutes.
- By airport bus (about 1 hour and 30 minutes): take the Airport Express to the Minhang Hotel stop, then walk to the Changsha railway station stop and take the Metro line 2 towards Yingwanzhen stop, cross the underground passage



- **From Changsha South Railway Station**
- By taxi: about 50 Yuan RMB, 40 minutes.
- By subway (about 35 minutes): walk to the Changsha South Railway Station stop and take the Metro line 2 towards Yingwanzhen (滢湾镇) stop, cross the underground passage



- **From Changsha Railway Station**
- By taxi: about 50 Yuan RMB, 30 minutes.
- By subway (4 Yuan RMB, about 30 minutes): walk to the Changsha railway station stop and take the Metro line 2 towards Yingwanzhen (滢湾镇) stop, cross the underground passage.



