

---

# **The 2013 3<sup>rd</sup> International Workshop on Image and Data Fusion (IWIDF 2013)**

**20-22 August 2013, Changbaishan, Antu, China**

## **Program**

**Organizer**

**Chinese Academy of Surveying and Mapping (CASM)**

**ISPRS WG VII/6 - Remote Sensing Data Fusion**

## IWIDF2013 Program

### Schedule

Date	August 20	August 21	August 22	August 23
Time	Tuesday	Wednesday	Thursday	Friday
a.m.	Opening Ceremony	Technical Session 1	Technical Session 3	Technical Visiting
	Plenary Session		Closing Ceremony	
p.m.	Poster Session	Technical Session 2	Tutorial	
	Editorial Board Meeting			
	Welcome Dinner			

---

## Opening Ceremony & Plenary Session

<b>Date: August 20, 2013 (Tuesday)</b> <b>Room: Main Meeting Room (Multi-functional Meeting Hall)</b> <b>Time: 09:00 – 12:00</b>	
Time	Activity
09:00 – 09:30	<b>Opening Ceremony</b> <b>Chairman: Jixian Zhang, Chairman of IWIDF 2013</b>
09:30 – 09:45	<b>Coffee / Tea Break</b>
<b>Plenary Session</b> <b>Chairman: Zhong Lu</b>	
Time	Activity
09:45 – 10:25	<b>Topic:</b> Change detection based on multi-temporal data fusion <b>Keynote Speaker:</b> Deren Li, Wuhan University, China
10:25 – 11:05	<b>Topic:</b> Very high resolution modeling of the NUS campus by fusion of aerial UAV image, terrestrial image and MMS point-cloud data <b>Keynote Speaker:</b> Armin Gruen, Federal Institute of Technology Zurich, Switzerland
11:05 – 11:45	<b>Topic:</b> Fusion of image and laser scanning data for urban mapping and geotechnical parameter estimation <b>Keynote Speaker:</b> Ayman Habib, University of Calgary, Canada
12:00 – 13:30	<b>Buffet Lunch (Banquet Hall)</b>

## Poster Session

Date: August 20, 2013 (Tuesday)	
Room: Small Meeting Room	
Time: 14:00 – 17:00	
<b>Poster</b>	
Paper ID.	Title/Author
01	Title: The development and industrialization recommendation of current aerial remote sensing technology Author: Zhigang Hong
02	Title: Monitoring the changes of lakes in the source region of Three Rivers with remote sensing data from 1976 to 2009 Author: Chengfeng Luo, Yuan Wang, Haoyan You, and Zhengjun Liu
03	Title: A high-efficiency fusion method of multi-spectral image Author: Xiaorong Xue, Jipeng Wang, Hongfu Wang, and Fang Xiang
10	Title: The research of mineral anomaly extraction process based on multi-resource geospatial data fusion Author: Weijie Jia, Hongrui Zhang, Jian Lin, and Honglei Zhao
14	Title: Integrating multi-source imagery data in a GIS system Author: Qian Liu
17	Title: Research of multi-baseline InSAR elevation inversion based on MLHE method Author: Fenfen Hua, Jixian Zhang, and Guoman Huang
19	Title: Image fusion and image quality assessment of fused images Author: Zhen Han, Xinming Tang, Xiaoming Gao, and Fen Hu
21	Title: A hierarchical image matching method for stereo satellite imagery Author: Fei Yan, Weian Wang, Shijie Liu, and Wen Chen
22	Title: Data fusion of mars express HRSC linear array pushbroom imagery based on the rigorous geometric model Author: Xun Geng, Qing Xu, Yuange Lan, Yifan Hou, Shuai Xing, and Chaozhen Lan
23	Title: Application of multisource spatial data fusion in urban emergency evacuation Author: Bowei Wen, Qun Sun, and Huanxin Chen
24	Title: Application of spatial data fusion in the production and updating of spatial data Author: Huanxin Chen, Li Xu, and Ziming Xiong
26	Title: Multi-source remote sensing images matching based on improved KAZE algorithm Author: Zongwei Wang, Huabin Wang, Guanghui Wang, Canhai Li, and Huachao Yang
30	Title: The multi-level and multi-scale factor analysis and extraction algorithm for multi-source remote sensing Author: Fan Yu, Haitao Li, Yi Jia, Yanshun Han, and Haiyan Gu

31	Title: Research on estimation crop planting area by integrating the active and passive remote sensing data Author: Yi Jia, and Fan Yu
33	Title: Simulation study on the effect of sand digging and heaping on SAR imaging in the Pearl River estuary Author: Xiaozhen Wang, Huaguo Zhang, Bin Fu, Weibing Guan, and Aiqin Shi
34	Title: Analysis on the change of vegetation coverage in Qinghai province from 2000 to 2012 Author: Jiao Wang, Qin Yan, Zhengjun Liu, and Chengfeng Luo
36	Title: Study on the technology and method of land cover classification for geographic national conditions surveying Author: Ying Jia, Haitao Li, Haiyan Gu, and Yanshun Han
37	Title: Urban building collapse detection using very high resolution imagery and airborne LiDAR data Author: Xue Wang, and Peijun Li
46	Title: Researches on the land-use change detection of mine area based on TM/ETM images Author: Qin Ye, Liling He, Min Ying, and Yi Lin
48	Title: A novel image registration algorithm for SAR and optical images based on virtual points Author: Cuifang Ai
49	Title: A robust PCT method based on complex least squares adjustment method Author: Haiqiang Fu, Jianjun Zhu, Changcheng Wang, Qianhua Xie, and Rong Zhao
55	Title: A modified method for polarimetric SAR calibration algorithm Author: Lu Liao, Pingxiang Li, and Jie Yang
56	Title: Classification of polarimetric SAR image based on the subspace method Author: Juan Xu, Zhen Li, Bangsen Tian, Quan Chen, and Ping Zhang
57	Title: Remote sensing classification method of wetland based on an improved SVM Author: Yi Lin, Mingge Shen, Bing Liu, and Qin Ye
58	Title: Experimental research on accuracy of aerotriangulation for UAV imagery Author: Ling Li, Yingcheng Li, and Xiaobo Ding
59	Title: Change detection of multi-polarimetric SAR data based on principal component analysis Author: Xi Chen, Tao Wu, and Nei Niu
65	Title: Adaptive spatial filtering of interferometric data stack oriented to distributed scatterers Author: Yunjun Zhang, Chou Xie, Yun Shao, and Minghuan Yuan
67	Title: Superresolution SAR imaging algorithm based on mvn and weighted norm extrapolation Author: P. Zhang, Q. Chen, Z. Li, Z. Tang, J. Liu and L. Zhao
68	Title: Data fusion technology of Multi-platform earth observation on agriculture Author: W. Xie, Y. Xue, L. Zhai, and H. Sang
69	Title: Sub-aperture focusing algorithm of geosynchronous SAR Author: Yun Zhang, Hongbo Li, Huizhi Xu and Bin Hu

---

**Editorial Board Meeting of International Journal of Image and  
Data Fusion (IJIDF)**

Date: August 20, 2013 (Tuesday)

Room: Lan Xige

Time: 14:30 – 16:30

<b>Time</b>	<b>Activity</b>
14:30 – 16:30	<b>The Fifth Editorial Board Meeting of International Journal of Image and Data Fusion</b> Editorial Board Members of IJIDF
18:00 – 20:00	<b>Welcome Dinner (Lan Xige and Lan Xixuan)</b>

## Technical Session

Date: August 21, 2013 (Wednesday)	
Room: Medium Meeting Room (Lan Xixuan)	
Time: 08:30 – 12:00	
<b>Session 1: Algorithms and Methods on Image and Data Fusion</b>	
Chair: Xiaolin Meng	
Time	Activity
08:30 – 09:00	<b>Title:</b> Frontiers of radar remote sensing <b>Invited Speaker:</b> Zhong Lu, U.S. Geological Survey, USA
09:00 – 09:30	<b>Title:</b> Comparison of two phase unwrapping methods for PSP time series analysis <b>Presenter:</b> Jicang Wu, Tongji University, China
09:30 – 10:00	<b>Title:</b> Remote sensing image fusion based on discrete fractional random transform for modified IHS <b>Presenter:</b> Qing Guo, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China
10:00 – 10:20	<b>Coffee / Tea Break</b>
10:20 – 10:50	<b>Title:</b> Data fusion of high-resolution satellite imagery and GIS data for automatic building extraction <b>Presenter:</b> Zhou Guo, Peking University, China
10:50 – 11:20	<b>Title:</b> Dynamic subsidence prediction in mining area by fusing InSAR and leveling measurements <b>Presenter:</b> Zefa Yang, Central South University, China
11:20 – 11:50	<b>Title:</b> Remote sensing image fusion: an update <b>Invited Speaker:</b> John van Genderen, University of Twente, the Netherlands
12:00 – 13:00	<b>Buffet Lunch (Banquet Hall)</b>

## Technical Session

Date: August 21, 2013 (Wednesday)	
Room: Medium Meeting Room (Lan Xixuan)	
Time: 13:00 – 17:20	
<b>Session 2: Image and Data Fusion Applications</b>	
Chair: John van Genderen	
Time	Activity
13:00 – 13:30	<b>Title:</b> Radar interferometric monitoring of a suspended bridge <b>Invited Speaker:</b> Xiaolin Meng, University of Nottingham, UK
13:30 – 14:00	<b>Title:</b> Fusion of GPS and InSAR measurements by constrained least squares: an alternative way for suppression of atmospheric artifacts <b>Invited Speaker:</b> Xiaoli Ding, The Hong Kong Polytechnic University, China
14:00 – 14:30	<b>Title:</b> INSAR everywhere: using the Isbas method to identify slow land surface deformation in rural and vegetated areas <b>Invited Speaker:</b> Andrew Sowter, University of Nottingham, UK
14:30 – 15:00	<b>Title:</b> Geometric integration of high resolution satellite imagery and applications to natural hazard mitigation <b>Invited Speaker:</b> Xiaohua Tong, Tongji University, China
15:00 – 15:20	<b>Coffee / Tea Break</b>
15:20 – 15:50	<b>Title:</b> A new methodology of modern remote sensing data processing <b>Invited Speaker:</b> Yu Li, Liaoning Technical University, China
15:50 – 16:20	<b>Title:</b> A general understanding for the food security situation of North Korea Based on Remotely Sensed Data <b>Invited Speaker:</b> Hongyan Zhang, Northeast Normal University, China
16:20 – 16:50	<b>Title:</b> Fusion of snow extent and depth data sets and the accuracy assessment <b>Invited Speaker:</b> Qiming Zhou, Hong Kong Baptist University, China
16:50 – 17:20	<b>Title:</b> High resolution PolSAR image classification based on genetic algorithm and support vector machine <b>Invited Speaker:</b> Pingxiang Li, Wuhan University, China
17:20 – 17:50	<b>Title:</b> A new calibration method of airborne interferometric SAR <b>Presenter:</b> Guoman Huang, Chinese Academy of Surveying and Mapping, China



---

## Technical Session

Date: August 22, 2013 (Thursday)

Room: Main Meeting Room (Multi-functional Meeting Hall)

Time: 08:30 – 11:00

### Session 3: Land Use/Cover Classification and Change Detection

Chair: Zhong Lu

Time	Activity
08:30 – 09:00	<b>Title:</b> Fusion of remote sensing data for Antarctic global change monitoring <b>Invited Speaker:</b> Rongxing Li, the Ohio State University, USA
09:00 – 09:30	<b>Title:</b> Selection of optimal remote sensing data and algorithms for land use/cover classification <b>Invited Speaker:</b> Dengsheng Lu, Center for Global Change and Earth Observations, Michigan State University, USA
09:30 – 10:00	<b>Title:</b> Monitoring of glacier volume variation from multi-source data over geladandong area <b>Presenter:</b> Yonghong Zhang, Chinese Academy of Surveying and Mapping, China
10:00 – 10:30	<b>Title:</b> Comparison of two fusion based building change detection methods using satellite stereo imagery and DSMs <b>Presenter:</b> Jiaojiao Tian, German Aerospace Center, Germany
10:30 – 10:50	<b>Coffee / Tea Break</b>

---

## Closing Ceremony

Date: August 22, 2013 (Thursday)	
Room: Main Meeting Room	
Time	Activity
11:00 – 11:30	Closing Ceremony
12:00 – 13:30	Buffet Lunch (Banquet Hall)

## Tutorial

Date: August 22, 2013 (Thursday)	
Venue: Landscape Resort	
Room: Medium Meeting Room	
Time	Activity
13:30 – 17:30	Half-day Tutorial Topic: Training on SAR/InSAR Instructor: Zhong Lu