

# Geoinformatics 2012

15-17 June 2012

## Final Program (updated on 13 June 2012)

*Conference Venue: Cheng Yu Tung Building, The Chinese University of Hong Kong, No. 12 Chak Cheung Street, Shatin, Hong Kong*

### 14 June 2012 (Thursday)

Time	Location	Program
2:00- 8:00pm	Hyatt Regency Hong Kong Shatin	Registration, Collection of PPT and Distribution of Conference Material
	Royal Park Hotel	
	Wen Chih Tang, Chung Chi College	

**\*\* Please go to the hotel/ hostel you stayed for registration and collect the conference material.**

**If you will NOT stay in the above hotel/ hostel, please go to **Hyatt Regency Hong Kong Shatin on 14 June 2012****

**OR Level 1, Cheng Yu Tung Building, CUHK on 15 June 2012 for registration and collection of the conference material. Thank you!**

## 15 June 2012 (Friday)

Time	Location	Program	Organizer(s)	Chair(s)	
8:30-9:00	Level 1	Registration			
9:00 – 10:35	LT1	Opening Ceremony		Hui Lin	
		9:00 – 9:45	Welcoming Remarks		
		9:45 – 10:35	Keynote Speech: <b>The Future of Digital Earth</b> Michael Goodchild <i>Department of Geography, University of California, Santa Barbara</i>		
10:35 – 11:00	Level 1- 3	Tea Break			
11:00 – 12:40	LT1	Keynote Speech Session 1		Anthony Yeh and Xiaoli Ding	
		11:00-11:50	<b>Global Sea-Level Rise: Observations and Geophysical Causes</b> Che Kwan Shum <i>Division of Geodetic Science, School of Earth Sciences, The Ohio State University</i>		
		11:50 – 12:40	<b>Virtual Reality and Digital Cultural Heritage -- From Mogao Caves to Chi Lin Nunnery</b> Deren Li <i>Chinese Academy of Sciences</i>		
12:40 – 2:00	Level 1- 3	Lunch Break			
2:00 – 3:45	LT5	Session 1.1	Student Paper Competition	Shaowen Wang	Shaowen Wang
		2:00 – 2:20	<b>A Theoretical Approach to Domain Decomposition for Parallelization of Digital Terrain Analysis</b> Guo Cheng, Ning Jing, Luo Chen <i>School of Electronic Science and Engineering, National University of Defense Technology</i>		
		2:20 – 2:40	<b>Travel Time Prediction Based on Historical Trajectory Data</b> Yijuan Jiang, Xiang Li <i>Key Laboratory of Geographical Information Science, East China Normal University</i>		
		2:40 – 3:00	<b>Spatial Scan Statistics Analysis of County-Level Population Growth Due to Net Migration in the Continental United States</b> Hu Wang, Diansheng Guo <i>Department of Geography, University of South Carolina, Columbia</i>		
	LT1	Session 1.2	Virtual Geographic Environment I	Hui Lin, Guonian Lv, Qing Zhu, Jianhua Gong and Xiong You	Hui Lin and Guonian Lv

		2:00 – 2:30	<b>Keynote Speech: Visual Analytics of Movement</b> Gennady Andrienko <i>Fraunhofer Institute IAIS, University of Bonn</i>		
		2:30 – 2:45	<b>Virtual Geographic Environment System Construction for Geography Field Practice in Lushan Area</b> Hong ZHANG <i>Yunnan University of Finance and Economics</i>		
		2:45 – 3:00	<b>Using Collaborative Virtual Geographic Environment for Fire Disaster Simulation and Virtual Fire Training</b> Rui Wang <sup>1</sup> , Bin Chen <sup>1</sup> , Fengru Huang <sup>2</sup> , Yu Fang <sup>1</sup> <sup>1</sup> <i>Institute of Remote Sensing and Geographic Information System, Peking University</i> <sup>2</sup> <i>School of Electronics Engineering and Computer Science, Peking University</i>		
		3:00 – 3:15	<b>Building a Smart Community Based on Virtual Geographic Environments and Internet of Things</b> Jun Sun <sup>1*</sup> , Jianhua Gong <sup>1,2</sup> , Jieping Zhou <sup>1</sup> , Wenhang Li <sup>1</sup> , Qishen Duan <sup>1</sup> <sup>1</sup> <i>State Key Laboratory of Remote Sensing Science Institute of Remote Sensing Applications, Chinese Academy of Sciences</i> <sup>2</sup> <i>Zhejiang &amp; CAS Application Center for Geoinformatics</i>		
		3:15 – 3:30	<b>Simulation and Visualization of Forest fire Growth in an Integrated 3D Virtual Geographical Environment - a Preliminary Study</b> Hongyu Huang <i>Key Lab of Spatial Data Mining &amp; Information Sharing of MOE</i>		
		3:30 – 3:45	<b>Workflow based Collaborative Virtual Geographic Environment System for Risk Assessment of Dam-break in Barrier Lake</b> Zhu Jun <sup>1</sup> , Hu Ya <sup>1</sup> , Gong Jianhua <sup>2</sup> , Li Yi <sup>2</sup> <sup>1</sup> <i>Faculty of Geosciences and Environmental Engineering, Southwest Jiaotong University</i> <sup>2</sup> <i>Institute of Remote Sensing Applications, Chinese Academy of Sciences</i>		
	<b>LT6</b>	<b>Session 1.3</b>	<b>High Performance Computer, Cyber GIS and Digital Divide I</b>	<b>A-Xing Zhu, Ning Jing, Luo Chen and Chenghu Zhou</b>	<b>A-Xing Zhu and Lei Wang</b>
		2:00 – 2:15	<b>Two-level Parallelization for Fully Distributed Hydrologic Modelling</b> Junzhi Liu <sup>1</sup> , A-Xing Zhu <sup>2</sup> <sup>1</sup> <i>State Key Lab of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences</i> <sup>2</sup> <i>Department of Geography, University of Wisconsin-Madison</i>		
		2:15 – 2:30	<b>Parallel Flow-Accumulation Calculation for Hydrology Analysis in Large Digital Elevation Models</b> Ling Jiang, Guo-an Tang, Xiaodong Song <i>Nanjing Normal University</i>		
		2:30 – 2:45	<b>Research on Parallel Computing of Spatial Vector Data Conversion Based on Common Interface</b> Xiaohui Jiang, Zhenjie Chen <i>Department of Geographical Information Science, Nanjing University</i>		
		2:45 – 3:00	<b>A distributed GIS vector data cache framework for high performance visualization and data updating</b> Hao Yu and Yong Gao <i>Peking University</i>		
		3:00 – 3:15	<b>Parallelized Remote Sensing Classifier Based on Rough Set Theory Algorithm</b> Xin Pan and Shuqing Zhang <i>Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences</i>		

		3:15 – 3:30	<b>OpenRS - An Open Software Platform for Remote Sensing Data Processing</b> Wanshou Jiang, Wei Guo, Jing Zhang, and Huayi Wu <i>State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University</i>		
			Discussant: Chaowei Yang		
	<b>LT3</b>	<b>Session 1.4</b>	<b>Conceptual Issues in Geographic Data Handling</b>	<b>Program Committee</b>	<b>Feng Lu</b>
		2:00 – 2:15	<b>Automated Generation of Schematic Network Maps: Two Principles and A New Strategy</b> Zhilin Li <i>The Hong Kong Polytechnic University</i>		
		2:15 – 2:30	<b>The Science and Practice of Cartographic Interaction</b> Robert E. Roth <i>University of Wisconsin-Madison</i>		
		2:30 – 2:45	<b>Towards a New Generation of Geospatial Catalog System</b> Yuqi Bai <i>Tsinghua University</i>		
		2:45 – 3:00	<b>Research Framework and Key Technology of Electric Map Multi-scale Representation</b> Fenli Jia <i>Information Engineering University, Zhengzhou</i>		
		3:00 – 3:15	<b>Empirical Analysis in Factors Affecting Spatial Data Sharing</b> Hsien Chao and Tien-Yin Chou <i>Dept. of Civil and Hydraulic Engineering, Feng Chia University</i>		
		3:15 – 3:30	<b>Intelligent Geospatial Data Searching Mechanism for Change Detection: A Metadata Perspective</b> Jung-Hong Hong and Yao-Hsien Yeh <i>Dept. of Geomatics, National Cheng-Kung University</i>		
		3:30-3:45	<b>Standardization Movement in Geographic Information Science and Life Science</b> Hanming Tu <i>Octagon Research</i>		
3:45-4:10	<b>Level 1- 3</b>	<b>Tea Break</b>			
4:10-6:10	<b>LT5</b>	<b>Session 1.5</b>	<b>GIS for Social Network Analysis</b>	<b>Shih-Lung Shaw</b>	<b>Shih-Lung Shaw and Bor-Wen Tsai</b>
		4:10 – 4:25	<b>A Space-time GIS of Integrating Physical, Virtual, and Social Activities</b> Ling Yin <sup>1</sup> and Shih-Lung Shaw <sup>2</sup> <sup>1</sup> <i>Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences</i> <sup>2</sup> <i>Department of Geography, The University of Tennessee at Knoxville, Knoxville, TN, USA</i>		
		4:25 – 4:40	<b>Relationships between Geographical Cluster and Cyberspace Community: A Case Study on Microblog</b> Chao Li, Zhongying Zhao, Shuguang Liu, Ling Yin, and Jun Luo <i>Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Graduate School of Chinese Academy of Sciences</i>		
		4:40 – 4:55	<b>Clustering LBSNS Users Based on Check-in Records</b> Zhengwei Sui, Yu Liu, Lun Wu, and Xiaolu Ji <i>Institute of Remote Sensing &amp; GIS, Peking University</i>		

		4:55 – 5:10	<b>Mobile Spatial Interaction in the Future Internet of Things</b> James D. Carswell and Junjun Yin <i>Digital Media Centre, Dublin Institute of Technology Digital Media Centre, Dublin Institute of Technology</i>		
		5:10 – 5:25	<b>Classification of an indoor routing network based on graph theory</b> Jukka M. Krisp, Patrick Peer and Linfang Ding <i>Technical University Munich (TUM), Cartography, Arcisstraße</i>		
		5:25 – 5:40	<b>Data Mining and Visualization Research of Check-in Data</b> Ming Wang, Longkun Qin, and Qingwu Hu <i>School of Remote Sensing and Information Engineering, Wuhan University</i>		
		5:40 – 5:55	<b>The Meaning of A Place: The case of Gongguan (公館) by VGI</b> Bor-Wen Tsai and Yu-Ling Hsu <i>Department of Geography, National Taiwan University</i>		
	<b>LT1</b>	<b>Session 1.6</b>	<b>Virtual Geographic Environment II</b>	<b>Hui Lin, Guonian Lv, Qing Zhu, Jianhua Gong and Xiong You</b>	<b>Yuemin Ding and Qing Zhu</b>
		4:10 – 4:25	<b>A Research on 3D Reconstruction of Building Rooftop Models from LiDAR Data and Orthophoto</b> Lihua Tong, Manchun Li, Yanming Chen, Yafei Wang, Wen Zhang, and Liang Cheng <i>Department of Geographical Information Science, Nanjing University</i>		
		4:25 – 4:40	<b>Automatic Reconstruction of 3D Virtual Geographic Scene Based on Aerial Images</b> Ka Zhang, Yehua Sheng, and Guonian Lv <i>Key Laboratory of Virtual Geographic Environment, MOE, Nanjing Normal University</i>		
		4:40 – 4:55	<b>Study on Coal Mine Real-time Gas Early Warning System Based on 3D geological Model</b> Mei Li <sup>1</sup> and Jinchuan Chen <sup>2</sup> <sup>1</sup> <i>Institute of Remote Sensing and Geographic Information System, Peking University</i> <sup>2</sup> <i>College of Resources Environment and Tourism, Capital Normal University</i>		
		4:55 – 5:10	<b>An Immersive Visualization System for Virtual 3D City Models</b> Juri Engel, Sebastian Pasewaldt, Matthias Trapp, and Jürgen DöLner <i>Hasso-Plattner-Institut, University of Potsdam</i>		
		5:10 – 5:25	<b>Integration of Virtual Reality with GIS</b> Liangchen Zhou, Bingxian Lin, Ming Liao, Jing Dai, and Guonian Lv <i>Key Lab of Virtual Geographic Environment, MOE, Nanjing Normal University</i>		
		5:25 – 5:40	<b>Semantics Constrained Profiling Approach for Complicated 3D City Models</b> Xiao Xie, Qing Zhu, Weiping Xu, Yeting Zhang, and Zhiqiang Du <i>State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University</i>		
		5:40 – 5:55	<b>A Tentative Study on the Virtual Geographic Environment (VGE) Aid Urban Design</b> Tianpeng Lin, Hui Lin, Mingyuan Hu <i>Institute of Space and Earth Information Science, The Chinese University of Hong Kong</i>		
	<b>LT6</b>	<b>Session 1.7</b>	<b>High Performance Computer, Cyber GIS and Digital Divide II</b>	<b>A-Xing Zhu, Ning Jing, Luo Chen and Chenghu Zhou</b>	<b>Ning Jing and Aijun Chen</b>
		4:10 – 4:25	<b>A Distributed Geospatial Data Storage and Processing Framework for Large-Scale WebGIS</b> Yunqin Zhong, Jizhong Han, and Jinyun Fang		

		<i>Institute of Computing Technology, Chinese Academy of Sciences</i>
4:25 – 4:40	<b>Decomposition Method of Raster Geographic Data Based on Parallel Computing</b> Zhibin Jin, Yingxia Pu, Jiechen Wang, Jingsong Ma, and Gang Chen <i>School of Geographic and Oceanographic Sciences, Nanjing University</i>	
4:40 – 4:55	<b>Research on Distributed Hilbert R tree Spatial Index Based on BIRCH Clustering</b> Yizhou Yang <sup>1</sup> , Lixin Wu <sup>12</sup> , JiatengGuo <sup>1</sup> , and Shanjun Liu <sup>1</sup> <i>Institute for Geo-informatics &amp; Digital Mine Research, Northeastern University, Academy of Disaster Reduction and Emergency Management, Beijing Normal University</i>	
4:55 – 5:10	<b>A Parallel Index Supporting Concurrent Queries For Finding Relevant Remote Sensing Images</b> Hui-zhong Chen <sup>1</sup> , Yong-Guang Chen <sup>2</sup> , Ning Jing <sup>1</sup> , and Luo Chen <sup>1</sup> <sup>1</sup> <i>College of Electronic Science and Engineering, National University of Defense Technology</i> <sup>2</sup> <i>Ordnance Engineering College</i>	
5:10 – 5:25	<b>Research on Parallel Algorithm for Polygon Rasterization</b> Yafei Wang and Zhenjie Chen <i>Department of Geographical Information Science, Nanjing University</i>	
5:25 – 5:40	<b>Application-matching Knowledge Based Engine for a Modelling Environment for Digital Terrain Analysis</b> Yan-jun Lu, Cheng-zhi Qin, A-Xing Zhu, and Wei-li Qiu <i>School of Geography, Beijing Normal University, State Key Laboratory of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, Department of Geography, University of Wisconsin Madison</i>	
	Discussant: Shaowen Wang	

	LT3	Session 1.8	GIS EcoSystem Studies and Conservation	Program Committee	Anrong Dang and Demin Zhou
		4:10 – 4:25	<b>Trends in Temperature and Extreme Temperature over the Beijing-Tianjin-Hebei Metropolitan Region During 1957-2009</b> Dan Meng*, Huili Gong, Xiaojuan Li, and Demin Zhou <i>State Key Laboratory Cultivation Base of Urban environmental process and digital simulation, Key Laboratory of Resource, Environment and GIS in Beijing, Key Laboratory of 3D Information Acquisition and Application, Ministry of Education, College of Resources Environment and Tourism, Capital Normal University</i>		
		4:25 – 4:40	<b>Research on sensitivity evaluation of soil erosion based on GIS in Jixi County</b> Jing Zhang, Man-chun Li, Chao-ran Yang, Chen Yang, Yong-xing Wan, and Fei-xue Li <i>School of Geographic and Oceanographic Science, Nanjing University</i>		
		4:40 – 4:55	<b>The impact on the Oriental White Stork habitat due to the agriculture development in Sanjiang Plain, Northeast China</b> Ling Zhang <sup>1,2,3</sup> , Xiaojuan Li <sup>1,2,3*</sup> , Xiaomeng Liu <sup>1,2,3</sup> and Demin Zhou <i><sup>1</sup>Base of the State Laboratory of Urban Environmental Processes and Digital Modeling, <sup>2</sup>Key Laboratory of 3D Information Acquisition and Application, Ministry of Education, <sup>3</sup>College of Resource Environment and Tourism, Capital Normal University</i>		
		4:55 – 5:10	<b>Identification of Critical Source Areas of Soil Erosion Using a GIS-based Watershed Model</b> Lajiao Chen <sup>12</sup> and A-Xing Zhu <sup>3</sup> <i><sup>1</sup>State Key Lab of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences  <sup>2</sup>Graduate University of Chinese Academy of Sciences, Chinese Academy of Sciences  <sup>3</sup>Department of Geography, University of Wisconsin-Madison, Madison</i>		
		5:10 – 5:25	<b>Study on natural and human impacts on red-crowned crane habitat in the Yellow River Delta Natural Reserve</b> HongWang <sup>1</sup> , Jay Gao <sup>2</sup> , and Liliang Ren <sup>1</sup> <i><sup>1</sup>State Key Laboratory of Hydrology-Water Resources and Hydraulic Engineering, School of Earth Sciences and Engineering, Hohai University  <sup>2</sup>School of Environment, University of Auckland</i>		
		5:25 – 5:40	<b>Essential Concept and General Framework of Smart National Park</b> Anrong Dang, Danming Zhang, and Xia Peng <i>School of Architecture, Tsinghua University</i>		

	<b>LT4</b>	<b>Session 1.9</b>	<b>Panel Discussion-Supporting Women in GIS</b>	<b>Moderator: Yongmei Lu</b>
		4:10-6:10	Panelists: <ul style="list-style-type: none"> <li>• Peng Gong, University of California, Berkeley &amp; Tsing-Hua University</li> <li>• Mei-Po Kwan, University of California, Berkeley</li> <li>• Nina Lam, Louisiana State University</li> <li>• Lin Liu, University of Cincinnati</li> <li>• Yongmei Lu, Texas state University</li> <li>• Lan Mu, University of Georgia</li> <li>• Xun Shi, Dartmouth College</li> <li>• Bing Xu, Tsinghua University</li> <li>• Xiaobai Yao, University of Georgia</li> </ul>	
6:10-6:30	<b><i>Break</i></b>			
6:30-9:00	<b><i>Welcome Banquet at Regency Ballroom, Hyatt Regency Hong Kong, Shatin</i></b>			



## 16 June 2012 (Saturday)

Time	Location	Program	Organizer(s)	Chair(s)	
9:00-11:15	LT1	<b>Keynote Speech Session 2</b>		<b>Fahui Wang and Yongmei Lu</b>	
		9:00 – 9:45	<b><i>Modeling and Predicting Crowding and Congestion in Small Spaces in Large Cities</i></b> Michael Batty <i>Center for Advanced Spatial Analysis (CASA), University College London</i>		
		9:45 – 10:30	<b><i>How GIS Can Help Address the Uncertain Geographic Context Problem in Social Science Research?</i></b> Mei-Po Kwan <i>Department of Geography, University of California, Berkeley</i>		
		10:30 – 11:15	<b><i>New Mapping and Analysis Tools for Global Change Studies</i></b> Peng Gong <i>Environmental Science Policy and Management, University of California, Berkeley</i>		
11:15-11:30	Level 1- 3	<b>Tea Break</b>			
11:30-12:55	LT1	<b>Session 2.1</b>	<b>Panel Discussion- Spatiotemporal Thinking, Computing, and Applications</b>	<b>Hui Lin and Chaowei Yang</b>	<b>Moderator: Chaowei Yang and Bo Huang</b>
		11:30-12:55	<p>Panelists:</p> <ul style="list-style-type: none"> <li>• Mike Batty, University College , London - Urban Simulations</li> <li>• Mike Goodchild, University of California, Santa Barbara - GIScience 2.0</li> <li>• Diansheng Guo, University of South Carolina - Spatiotemporal Visualization</li> <li>• Yee Leung, The Chinese University of Hong Kong - A remark on scale in spatio-temporal analysis</li> <li>• Mei-Po Kwan, University of California, Berkeley - Spatiotemporal Social Sciences</li> <li>• Xia Li, Sun Yat-sen University - Agent-Based Modeling for Spatial Decision Making</li> <li>• Shih-Lung Shaw, University of Tennessee/Wuhan University - Space-Time Geography</li> </ul> <p>We will have 10 minutes presentation from each panelist followed by discussions on a set of strategic questions sent to the panelist and shared with the audience.</p> <p>This panel is one of a series of panels organized in several venues with the objective of identifying a research agenda for the same-name Industry/University Cooperative Research Center.</p>		
12:55-2:00	Level 1- 3	<b>Lunch Break and Taylor &amp; Francis Reception at Level 2</b>			

2:00-3:45	<b>Executive Lounge</b>	<b>Session 2.2</b>	<b>Workshop on Cyber GIS</b>		<b>Shaowen Wang</b>
		2:00-3:45	<p><i>(Only for workshop registered delegates and pre-registration is required)</i></p> <p>CyberGIS has emerged as a new modality of computational and geographic information sciences based on the seamless integration of cyberinfrastructure, GIS, and spatial analysis and modeling. The CyberGIS Gateway (<a href="https://gisolve2.cigi.illinois.edu/home/">https://gisolve2.cigi.illinois.edu/home/</a>) represents an active online CyberGIS community environment. User-centric functionality and transparent access to sophisticated cyberinfrastructure are key issues for successful development and use of the Gateway.</p> <p>This hands-on tutorial aims to address these issues. Specifically, most recent advances in Web and cloud computing technologies are demonstrated for the development of highly usable and collaborative rich-client Web environments to empower cyberinfrastructure-based geospatial problem solving. Using multiple national and international cyberinfrastructure environments, the instructor will illustrate how to employ cyberinfrastructure capabilities for spatial analysis and modeling, and implement service interfaces without exposing cyberinfrastructure complexities to Gateway users.</p> <p>The tutorial has the following four specific objectives: 1) demonstrate the use of cyberinfrastructure resources and services for geospatial problem solving, 2) understand how to access CyberGIS capabilities through the use of simplified application programming interfaces (API), 3) use multiple examples to learn about CyberGIS Gateway user interfaces; and 4) learn how to gain shared access to CyberGIS services and, thus, enable collaboration within the Gateway user communities.</p>		
	<b>LT1</b>	<b>Session 2.3</b>	<b>High Performance Computer, Cyber GIS and Digital Divide III</b>	<b>A-Xing Zhu, Ning Jing, Luo Chen and Chenghu Zhou</b>	<b>Bin Li and Qinghua Guo</b>
		2:00 – 2:15	<p><b>A Novel Parallel Depression Removing Algorithm for Hydrology Analysis in Digital Elevation Models</b>  Xiaodong Song, Guo-an Tang, Ling Jiang, Gang Zhang, and Kejian Qian  <i>Key Lab of Virtual Geographical Environment, Ministry of Education, Nanjing Normal University</i></p>		
		2:15 – 2:30	<p><b>A Parallel Shortest Path Algorithms Based On Striping-Partition</b>  Zhenglong Tang, Wenbin Sun, Zhiyuan Yan, Jiang Wang, and Huili Liu  <i>China University of Mining &amp; Technology</i></p>		
		2:30 – 2:45	<p><b>A Parallelized Multi-objective Particle Swarm Optimization model to design soil sampling network</b>  Dianfeng Liu<sup>1,2</sup>, Yaolin Liu<sup>1,2*</sup>, Yanfang Liu<sup>1,2</sup>, and Xiang Zhao<sup>1,2</sup>  <sup>1</sup><i>School of Resource and Environment Science, Wuhan University</i>  <sup>2</sup><i>Ministry of Education Key Laboratory of Geographic Information System, Wuhan University</i></p>		
		2:45 – 3:00	<p><b>Parallel Algorithm Designed for Polygon Vectorization</b>  Jinbiao Wei and Zhenjie Chen  <i>School of Geographic and Oceanographic Sciences, Nanjing University</i></p>		
		3:00 – 3:15	<p><b>A MapReduce Approach for Processing Large-scale Remote Sensing Images</b>  Yi Liu<sup>1</sup>, Luo Chen<sup>1</sup>, Jing Ning<sup>1</sup>, and Dianhua Yang<sup>2</sup>  <sup>1</sup><i>College of Electronic Science and Engineering, National University of Defense Technology</i>  <sup>2</sup><i>Key Lab of 3D Information Acquisition and Application, Ministry of Education, Capital Normal University</i></p>		
		3:15 – 3:30	<p><b>Mapping Sub-nosed Monkey Habitats in the Digital Age</b>  A-Xing Zhu  <i>Department of Geography, University of Wisconsin</i></p>		

			Discussant: Diansheng Guo	
LT6	Session 2.4	GIS and Studies of Natural Disasters I	Wanglin Yan	Wanglin Yan and Rongrong Li
	2:00 – 2:15	<b>Leading Talk: Challenges to Spatial Information Science after March 11</b> Yasushi Asami <i>The Center for Spatial Information Science, The University of Tokyo</i>		
	2:15 – 2:30	<b>Development and Application of a General-use Mapping Tool for Relief and Reconstruction Activities after March 11</b> Hitoshi Taguchi, Yuichiro Usuda, Tai-young Yi, Yohei Sunaga, Hiroaki Tsubokawa, and Toshinari Nagasaka <i>Social System Research Department, National Research Institute for Earth Science and Disaster Prevention</i>		
	2:30 – 2:45	<b>Quantifying the Effect of DEM Error on an Expert Knowledge-based Approach to Landslide Susceptibility Mapping</b> Lili Bao <sup>1</sup> , Cheng-Zhi Qin <sup>1*</sup> , and A-Xing Zhu <sup>1,2</sup> <sup>1</sup> <i>State Key Laboratory of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research</i> <sup>2</sup> <i>Department of Geography, University of Wisconsin Madison</i>		
	2:45 – 3:00	<b>An Internet-based Prototype Platform for Natural Disaster Risk Communication</b> Laigen Dong <sup>1*</sup> , Lian Xiong <sup>1</sup> , and Linglin Zeng <sup>2</sup> <sup>1</sup> <i>School of Remote Sensing and Information Engineering, Wuhan University</i> <sup>2</sup> <i>State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University</i>		
	3:00 – 3:15	<b>Risk Analysis of City Emergency Evacuation based on Multi-Agent Simulation</b> Zhiyong Lin, Zhao Yan, and Jie Shan <i>School of Remote Sensing and Information Engineering, Wuhan University</i>		
	3:15 – 3:30	<b>Estimate the Economic Losses of Hurricane IKE in the Greater Houston Region</b> Qisheng Pan <i>Department of Urban Planning and Environmental Policy, Texas Southern University, Houston</i>		
	3:30 – 3:45	<b>Development and Application of GIS for Post-Disaster Reconstruction</b> Akihiro Oba <sup>1</sup> and Wanglin Yan <sup>2*</sup> <sup>1</sup> <i>Graduate School of Media and Governance, Keio University</i> <sup>2</sup> <i>Faculty of Environment and Information Studies, Keio University</i>		
LT5	Session 2.5	Spatial Crime Analysis and Modeling	Xinyue Ye and Lin Liu	Xinyue Ye and Lin Liu
	2:00 – 2:15	<b>Measuring scales of space-time interaction among crime events</b> Xinyue Ye <sup>1</sup> , Michael Carroll <sup>2</sup> , Ling Wu <sup>3</sup> <sup>1</sup> <i>Center for Regional Development and School of Earth, Environment and Society, Bowling Green State University</i> <sup>2</sup> <i>Center for Regional Development and Department of Economics, Bowling Green State University</i> <sup>3</sup> <i>College of Criminal Justice, Sam Houston State University</i>		
	2:15 – 2:30	<b>Why Police and Policing Need GIS?: A Review</b> Fahui Wang <i>Department of Geography &amp; Anthropology, Louisiana State University</i>		

		2:30 – 2:45	<b>A Residential Burglary Simulation Model with Real-World Calibration</b> Fang Qiu and Bryan Chastain <i>The University of Texas at Dallas</i>		
		2:45 – 3:00	<b>Geospatial Data Integration and Processing for the Investigation of Urban Neighborhood Crime</b> Weiming Li <i>California State Polytechnic University, Pomona</i>		
		3:00 – 3:15	<b>An Analysis of Crime Hot Spots Using GPS Tracking Data of Children and Agent-Based Simulation Modeling</b> George Kikuchi <sup>1*</sup> , Mamoru Amemiya <sup>2</sup> , and Takahito Shimada <sup>3</sup> <sup>1</sup> <i>Department of Criminology, California State University,</i> <sup>2</sup> <i>Center of Spatial Information Science, University of Tokyo</i> <sup>3</sup> <i>Department of Criminology and Behavioral Sciences, National Research Institute of Police Science</i>		
		3:15 – 3:30	<b>Progress of Crime Geography in China</b> Lin Liu, Chao Jiang, and Huanli Tang <i>School of Geography and Planning, Sun Yat-sen University</i>		
	<b>LT3</b>	<b>Session 2.6</b>	<b>GIS-based Application Systems</b>	<b>Program Committee</b>	<b>Xiaohua Tong and Yuan Tian</b>
		2:00 – 2:15	<b>Assessment of Wetland Ecological Health in Honghe from 1975 to 2006</b> Yiran Zhang <sup>1</sup> , Yihan Wang <sup>2</sup> , and Demin Zhou <sup>3*</sup> <sup>1</sup> <i>Base of the State Laboratory of Urban Environmental Processes and Digital Modeling, Capital Normal University</i> <sup>2</sup> <i>Laboratory of Riverine Ecological Conservation and Technology, Chinese Research Academy of Environmental Sciences</i> <sup>3</sup> <i>Northeast Institute of Geography and Agricultural Ecology, Chinese Academy of Sciences</i>		
		2:15 – 2:30	<b>Pollution Source Management and Pollution Emergency Response Decision Support Platform of Spatial Information</b> Kun Yang <i>GIS Technology Research Center of Resource and Environment in Western China, Ministry of Education</i>		
		2:30 – 2:45	<b>Agent-Based Analysis of the Diffusion of Photovoltaic Energy Systems between Households</b> Tomoki Kobayashi <sup>1</sup> , Wanglin Yan <sup>2*</sup> <sup>1</sup> <i>Graduate School of Media and Governance, Keio University</i> <sup>2</sup> <i>Faculty of Environmental Information, Keio University</i>		
		2:45 – 3:00	<b>An intelligent visualization system for landslide monitoring with multi-sensor networks</b> Wen Chen <sup>1</sup> , Hongchao Fan <sup>1</sup> , Tiantian Feng <sup>1,2</sup> , Guochao Wu <sup>1,2</sup> , Weiyue Li <sup>1,2</sup> , Gang Qiao <sup>1,2</sup> , Hangbin Wu <sup>1,2</sup> , Xiaohua Tong <sup>1,2</sup> , Chun Liu <sup>1,2</sup> , Weian Wang <sup>1,2</sup> , and Rongxing Li <sup>1,3</sup> <sup>1</sup> <i>Center for Spatial Information Science and Sustainable Development, Tongji University</i> <sup>2</sup> <i>Department of Surveying and Geoinformatics, Tongji University</i>		

		3:00 – 3:15	<b>Development and Application of Three-dimension Simulation Engine in Geological Environment Simulation with A Case Study in Yilin</b> Yongan Zhao <sup>1,2,3</sup> , Shutao Huang <sup>2</sup> , Lun Wu <sup>1</sup> , Yuan Tian <sup>1*</sup> <sup>1</sup> <i>Institute of Remote Sensing and Geographic Information System</i> <sup>2</sup> <i>Peking University, Beijing Research Institute of Uranium Geology</i> <sup>3</sup> <i>An IAEA-CAEA Joint Exploration Technique Center of Uranium Resources</i>		
		3:15 – 3:30	<b>A Method for Optimizing the Volume of Earthwork in the Design of Mountain Building</b> Ziyu Tong <sup>1</sup> and Rong Zhong <sup>2</sup> <sup>1</sup> <i>School of Architecture and Urban Planning Nanjing University</i> <sup>2</sup> <i>Yangtze River Urban Architectural Design CO., LTD.</i>		
		3:30 – 3:45	<b>The Concept and Framework of Smart Coalmine</b> Shanjun Mao <i>Institute of Remote Sensing and Geographic Information System, Peking University</i>		
	<b>LT2</b>	<b>Session 2.7</b>	<b>Remote Sensing Techniques I</b>	<b>Program Committee</b>	<b>Desheng Liu and Fang Qiu</b>
		2:00 – 2:15	<b>Remote Sensing Algorithm Platform in Windows Azure</b> Deqiang Gan, Keping Du, and Yonghua Qu <i>Beijing Normal University</i>		
		2:15 – 2:30	<b>Design and Implementation of Cross-platform GIS Prototype for Geological Applications of RS</b> Liang Liu and Yuan Tian* <i>Institute of Remote Sensing and Geographic Information System, Peking University</i>		
		2:30 – 2:45	<b>Object-oriented remote sensing imagery classification accuracy assessment based on confusion matrix</b> Lina Yi and Guifeng Zhang <i>The College of GeoScience and Surveying Engineering, The Academy of Opto-electronics, Chinese Academy of Sciences</i>		
		2:45 – 3:00	<b>Morphologic feature detection from LiDAR data using BU algorithm</b> Lei Wang <i>Department of Geography and Anthropology, Louisiana State University</i>		
		3:00 – 3:15	<b>Feature selection using rough set theory for object-oriented classification of remote sensing imagery</b> Guifeng Zhang and Lina Yi <i>The Academy of Opto-electronics, The College of GeoScience and Surveying Engineering</i>		
		3:15 – 3:30	<b>An Image Fusion Method Based on Region Segmentation and Wavelet Transform</b> Ping Sun and Lei Deng <i>School of Resource and Environmental Science, Capital Normal University</i>		
		3:30 – 3:45	<b>An MAP-MRF Approach to Landsat ETM+ SLC-off Image Classification</b> Desheng Liu and Xiaolin Zhu <i>Department of Geography, The Ohio State University</i>		
3:45-4:10	<b>Level 1- 3</b>	<b>Tea Break</b>			

4:10-5:55	<b>Executive Lounge</b>	<b>Session 2.8</b>	<b>Workshop on Cloud Computing</b>	<b>Chaowei Yang</b>
		4:10-5:55	<p><i>(Only for workshop registered delegates and pre-registration is required)</i></p> <p><b>Prerequisites:</b> Understanding GIS basics and cloud computing concepts, and working experience with Web transactions, such as purchasing tickets from ctrip.com</p> <p><b>Description:</b> Cloud computing provides a new generation cyberinfrastructure for computing needs of scientific research, application development, and education. Cloud computing has supported projects with different computing needs. These projects range from daily operational WebGIS to high performance computing geospatial simulations. By leveraging cloud computing, the projects can be enabled with enough computing resources (that is not available previously to the public) while without having to worry about hardware maintenance and system administration. Most of all, cloud computing reduces the project cost by charging the project only when computing is being used in a pay-as-you-go fashion. Many broad spectrum projects were conducted to investigate how cloud computing can support GIS and geospatial sciences and the projects' feedback was utilized to help build better cloud computing platform.</p> <p>This tutorial integrates GMU CISC's experiences in the projects of InterAgency GeoCloud, NASA Nebula, cloud-enable GEOSS clearinghouse, cloud-enable the NASA spatial web portal, and the design and development of Data as a Service (DaaS). I will cover three topics in this 1 hour and 45 mins tutorial for participants to gain a practical and in depth understanding of spatial cloud computing:</p> <ol style="list-style-type: none"> <li>1. A 30-minute introduction to spatial cloud computing will build the common understanding of how cloud computing supports geoinformatics and how spatiotemporal thinking and computing have played in building a better cloud computing platform.</li> <li>2. A 30-minute hands-on experience will give participants the opportunity to cloud-enable a geospatial application by choosing one from three different cloud platforms: a) Amazon EC2 (IaaS), b) Microsoft Azure (PaaS), and c) CISC private cloud (DaaS).</li> <li>3. A 30 minutes presentation will introduce the cutting-edge research and development examples for utilizing spatial cloud computing based on a special issue of spatial cloud computing and two geospatial communities' practices.</li> <li>4. 15 minutes Q&amp;As</li> </ol> <p>The participants will a) learn fundamentals of cloud computing, b) practice how to cloud-enable a geospatial application and c) understand the future research directions.</p>	

	<b>LT6</b>	<b>Session 2.9</b>	<b>GIS and Studies of Natural Disasters II</b>	<b>Wanglin Yan</b>	<b>Nina Lam and Wanglin Yan</b>	
		4:10– 4:25	<b>A GIS Augmented Medium-Term Earthquake Forecast System</b> Benjamin Zhan <sup>1</sup> , Zhongliang Cai <sup>2</sup> , Zhiyue Lu <sup>2</sup> , and Yiqing Zhu <sup>3</sup> <sup>1</sup> Texas State University-San Marcos <sup>2</sup> School of Resource and Environmental Science, Wuhan University <sup>3</sup> Chinese Antarctic Center of Surveying and Mapping, Wuhan University, China Earthquake Administration			
		4:25 – 4:40	<b>Analysis of Texture Extraction Parameters in Oil Spill Monitoring by SAR Image</b> Lai Wei and Zhuowei Hu College of Resources Environment and Tourism, Capital Normal University, Key Lab of Resources Environment and GIS, Key Lab of Integrated Disaster Assessment and Risk Governance of the Ministry of Civil Affairs			
		4:40 – 4:55	<b>Research on the Management and Expression of Disaster Data</b> Yu Ma, Fuzhou Duan, Hao Liu, Jinyan Tian, and Guangyao Duan College of Resources Environment and Tourism, Capital Normal University, Key Lab of 3D Information Acquisition and Application			
		4:55 – 5:10	<b>Using SOM and DBSCAN-based Models for Landslide Hazard and Spatial Correlations Analysis: A Case Study in Central Taiwan</b> Pi-Hui Huang <sup>1</sup> , Wen-Chieh Chou <sup>2</sup> , and Wen-Tzu Lin <sup>3*</sup> <sup>1</sup> Department of Land Management, Feng Chia University <sup>2</sup> Department of Civil Engineering and Engineering Informatics, Chung Hua University <sup>3</sup> Department of Design for Sustainable Environment, Ming Dao University			
		5:10 – 5:25	<b>Natural Disaster Risk Communication-Understandings, Framework, Targets and Challenges</b> Daxiang Xiang Changjiang River Scientific Research Institute			
		5:25 – 5:40	<b>A Hazard Assessment of Secondary Disasters after Earthquake in Wenchuan</b> Wei Yang <sup>1</sup> , Zhong Zheng <sup>2</sup> and Wenji Zhao <sup>2</sup> <sup>1</sup> Urban Environmental Process and Digital Modeling Laboratory <sup>2</sup> Capital Normal University, Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences			
		5:40 – 5:55	<b>On Community Resilience Measurement: Bridging Geospatial Analysis and Adaptive Management</b> Nina Lam, Margret Reams, Kenan Li, Fei Wang, Danielle LaRock, and Ariele Baker Department of Environmental Sciences Louisiana State University			
	<b>LT5</b>	<b>Session 2.10</b>	<b>Monitoring and Modeling Land Use I</b>	<b>Program Committee</b>	<b>Tien-Yin Chou and Xingfa Gu</b>	
	4:10 – 4:25	<b>Using an improved spatial clustering model for evaluation of industry agglomeration</b> Pi-Hui Huang <sup>1</sup> , Tien-Yin Chou <sup>2</sup> , and Wen-Tzu Lin <sup>2</sup> <sup>1</sup> Department of Land Management, Feng Chia University <sup>2</sup> Department of Urban Planning and Spatial Information, Feng Chia University				
4:25 – 4:40	<b>Analysis of the Characteristic and the Driving Force of Island-town Spatial Expansion: A Case Study in Pingtan County</b> Wu-yang Hong , Man-chun Li, Yong-xing Wang ,Na Lin <sup>2</sup> , Jin-biao Wei, and Fei-xue Li Department of Geographic Information Science, School of Geographic & Oceanographic Sciences, Nanjing University, College Environment and Recourses, Institute of Remote Sensing Information Engineering, Fuzhou university					

		4:40 – 4:55	<b>Zoning Analysis of Ecosystem Services Value in downtown of Langfang City</b> Kun Mao, Qiu hao Huang, Min Liu, Wei Chen, and Manchun Li <i>Key Laboratory of Geographical Information Science, School of Geographic &amp; Oceanographic Sciences, Nanjing University</i>		
		4:55 – 5:10	<b>Study on the Conversion between Farmland and Pastoral Land and its Affecting Factors in the Western of the Songnen Plain</b> Min Liu, Manchun Li, Xiaoyan Li, Hexia Zhang, Qun zhang, and Qiu hao Huang <i>Key Laboratory of Geographical Information Science, School of Geographic &amp; Oceanographic Sciences, Nanjing University</i>		
		5:10 – 5:25	<b>Comparison of Different Classifiers for Land Use Classification of Multispectral Remote Sensing Imagery</b> Takuya Inoue, Guido Waldhoff and Georg Bareth <i>Geography, University of Cologne</i>		
	<b>LT3</b>	<b>Session 2.11</b>	<b>Geodetic Science and Global Change</b>	<b>Hansheng Wang, Holger Steffen and Liming Jiang</b>	<b>Holger Steffen and Hansheng Wang</b>
		4:10– 4:30	<b>Evaluation of groundwater depletion in North China using the Gravity Recovery and Climate Experiment (GRACE) and in situ observations (Invited talk)</b> Min Zhong <sup>1,2*</sup> , Wei Feng <sup>1,3,4</sup> , Hou-Ze Xu <sup>1,2</sup> , and Jean-Michel Lemoine <sup>4</sup> <sup>1</sup> <i>State Key Laboratory of Geodesy and Earth's Dynamics</i> <sup>2</sup> <i>Institute of Geodesy and Geophysics, Chinese Academy of Sciences, Institute of Geophysics, Huazhong University of Science and Technology</i> <sup>3</sup> <i>Graduate University of Chinese Academy of Sciences</i> <sup>4</sup> <i>CNES/GRGS, Toulouse</i>		
		4:30 – 4:50	<b>Geodetic measurements of current mass movements and their implications for global change (Invited talk)</b> Holger Steffen <sup>1</sup> , Patrick Wu <sup>2</sup> , Hansheng Wang <sup>3</sup> , and Lulu Jia <sup>3</sup> <sup>1</sup> <i>Department of Geoscience, University of Calgary, Calgary, University of Calgary</i> <sup>2</sup> <i>State Key Laboratory of Geodesy and Earth's Dynamics, Institute of Geodesy and Geophysics, Chinese Academy of Sciences</i> <sup>3</sup> <i>State Key Laboratory of Geodesy and Earth's Dynamics, Institute of Geodesy and Geophysics, Chinese Academy of Sciences</i>		
		4:50 – 5:05	<b>The Ice Mass Balance of East Antarctica from Satellite Altimetry and GRACE</b> Yuande Yang, Dongchen E, Fei Li, and Cheinway Hwang <i>Chinese Antarctic Center of Surveying and Mapping, Wuhan University</i> <i>Department of Civil Engineering, National Chiao Tung University</i>		
		5:05 – 5:20	<b>Surface Movement of Mountain Glaciers in the Tuomuer-Khan Tengri Mountain Ranges</b> Jia Li and Zhiwei Li <i>School of Geoscience and Info-Physics, Central South University</i>		
		5:20 – 5:35	<b>Zero Calibration of Bottom Pressure Gauge in Antarctic: A Case Study at Chinese Zhongshan Station Using GPS Techniques</b> Jifeng Huang, Dongchen E, and Shengkai Zhang <i>Chinese Antarctic Center of Surveying and Mapping, Wuhan University</i>		
		5:35 – 5:50	<b>Displacement Estimation of Gangotri Glacier with TerraSAR-X Quad-pol Data</b> Lin Liu <sup>1</sup> , Liming Jiang <sup>1*</sup> , Hansheng Wang <sup>1</sup> , Qiang Shen <sup>1</sup> , and Bo Hu <sup>1,2</sup> <sup>1</sup> <i>Key Laboratory of Dynamical Geodesy, Institute of Geodesy and Geophysics, Chinese Academy of Sciences</i> <sup>2</sup> <i>Graduate School of Chinese Academy of Sciences</i>		



	<b>LT2</b>	<b>Session 2.12</b>	<b>Remote Sensing Techniques II</b>	<b>Program Committee</b>	<b>Jie Shan and Jin-Tsong Hwang</b>
		4:10 – 4:25	<b>An Improved Segmentation of High Spatial Resolution Remote Sensing Image based Marker-based Watershed Algorithm</b> Boren Li and Mao Pan <i>School of Earth and Space Sciences, Peking University</i>		
		4:25 – 4:40	<b>Modification of SMB speckle filter for polarimetric TerraSAR-X data</b> Hongzhong Li and Jinsong Chen <i>Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences</i>		
		4:40 – 4:55	<b>Denoising of Hyperspectral Imagery Using a Spatial-Spectral Domain Mixing Prior</b> Shaolin Chen, Xiyuan Hu, and Silong Peng <i>National ASIC Design and Engineering Center (NADEC), Institute of Automation, Chinese Academy of Sciences</i>		
		4:55 – 5:10	<b>Object-Oriented Land Cover Classification of HJ-1A/B CCD Image based on multi-classifier</b> Jianhui Xu, Weimin Ju, and Zhongwen Hu <i>International Institute for Earth system Science, Nanjing University</i>		
		5:10 – 5:25	<b>Semi-automatic Segmentation of High Resolution Remote Sensing Image Based on Region Growing</b> Zhenhua Wang and Xiangyun Hu <i>School of Remote Sensing and Information Engineering, Wuhan University</i>		
		5:25 – 5:40	<b>An Error Analysis for UAV Remote Sensing</b> Yuxia Huang <sup>1</sup> , Lihong Su <sup>2</sup> , Gary Jeffress <sup>1</sup> <sup>1</sup> <i>Geographic Information Science Program, School of Engineering and Computing Science, Texas A&amp;M University – Corpus Christi, Corpus Christi, TX, USA</i> <sup>2</sup> <i>Harte Research Institute, Texas A&amp;M University – Corpus Christi, Corpus Christi, TX USA</i>		
	<b>LT1</b>	4:10-5:55	<b>CPGIS Work Meeting</b>	<b>Xun Shi and Diansheng Guo</b>	
6:00	<b>Assembly at Level 1, Cheng Yu Tung Building after the program. Coaches will be arranged to Kowloon Public Pier, Tsim Sha Tsui</b>				
7:00-9:30	<b>CPGIS Night- Symphony of Lights Cruise (for CPGIS members and invited guests only)</b>				

## 17 June 2012 (Sunday)

Time	Location	Program		Organizer(s)	Chair(s)	
9:00-10:15	Level 2	Session 3.1	Poster Session			Matthew Pang
		9:00-10:15	95	<b>Research of Floods Rapid Extraction Based on</b> Rui Zhang and Yonghua Sun <i>Capital Normal University</i>		
			102	<b>The Method for Rapid Extraction of Vegetation Supply Water Index</b> Zhuowei Hu and Meichen Guo <i>Capital Normal University</i>		
			117	<b>Responses of grasslands and forests to drought in Northeast China</b> Jing Peng and Dong Wenjie <i>Beijing Normal University</i>		
			132	<b>Study on Industrial Land Consolidation Based on GIS—Take an Example of Wujin District, Changzhou, China</b> Xiaowei Ma and Zhenjie Chen <i>Department of Geographical Information Science, Nanjing University</i>		
			164	<b>Comparative spatio-spectral heterogeneity analysis using broadband and hyperspectral airborne images</b> Bingwen Qiu <i>Fuzhou University</i>		
			171	<b>Database Construction of General Land Use Plan : A Case Study of Changzhou National Hi-Tech District (CND)</b> Shuo Yan and Feixue Li <i>School of Geographic &amp; Oceanographic Sciences, Nanjing University</i>		
			186	<b>3D Modeling and Accuracy Assessment- A Case Study of Photosynth</b> Jin-Tsong Hwang*, Jie-Shi Weng, and Yi-Ting Tsai <i>Dept. of Real Estate and built Environment, National Taipei University</i>		
			196	<b>Beijing-Tianjin intercity railway with TerraSAR data</b> Lufei Du <i>Capital Normal University</i>		
			197	<b>Research on Method of Extracting Vegetation Information based on Band Combination</b> Lijuan Zhao <i>Capital Normal University</i>		
			213	<b>Comparison with semi-empirical kernel functions for modeling reflectance anisotropy of snow</b> Ying Qu, Qiang Liu, Lizhao Wang, and Suhong Liu <i>Beijing Normal University</i>		
	261	<b>A Curvature-Based Statistical Method for Generating DTM From LiDAR Point Cloud</b> Jianhua Wan, Ronggang Huang, Zhe Zeng, and Shujuan Sun <i>School of Geosciences China University of Petroleum</i>				
	311	<b>Predicting the Potential Distribution of Bamboo with Species Distribution Models</b> Jiabin Jin, Hong Jiang, Jianhui Xu, Wei Peng, Linjing Zhang, Xiuying Zhang, and Yong Wang <i>International Institute for Earth System Science, Nanjing University</i>				

		<p><b>333</b> <b>The hydrological response to human activities in Guishui River Basin, Beijing, China</b> Yuming Liu, Jing Zhang, Pengfei Wu, and Huili Gong <i>Capital Normal University</i></p>		
		<p><b>332</b> <b>A research on population emergency evacuation based on revised ACO-CA</b> Chunzhu Wei <i>University of Electronic Science and Technology of China</i></p>		
		<p><b>343</b> <b>Estimation of Vegetation Water Content from MODIS: Application In Forest Fire Danger Assessment</b> Minbin Jiang <i>Capital Normal University</i></p>		
		<p><b>363</b> <b>A Method of Airborne Remote Sensing Image Quality Assessment Based on Image Matching</b> JinyanTian<sup>1</sup>, Fuzhou Duan<sup>1</sup>, XinyuanQu<sup>1</sup>, Yuan Yuan<sup>2</sup>, and Yu Ma<sup>3</sup> <sup>1</sup><i>Resource Environment &amp; Tourism College Capital Normal University, Beijing, China</i> <sup>2</sup><i>Beijing Forestry University School Information</i> <sup>3</sup><i>Capital Normal University</i></p>		
		<p><b>374</b> <b>3D Symbol Design Based on Linguistic Methodology</b> Fenli Jia, Qing Xia, and Jiangpeng Tian <i>Institute of Surveying and Mapping, Information Engineering University, Zhengzhou, China</i></p>		
		<p><b>438</b> <b>Study on Holonic Cooperative Distributed Geographic Modeling Environment</b> Hui Yang<sup>1</sup>, Guonian Lv<sup>2</sup>, Yehua Sheng<sup>2</sup>, and Cefei Feng<sup>3</sup> <sup>1</sup><i>China University of Mining and Technology</i> <sup>2</sup><i>Nanjing Normal University</i> <sup>3</sup><i>Xuzhou Normal University</i></p>		
		<p><b>449</b> <b>Research on log Management System of Geographical Information Sharing Platform Based on WebGIS</b> Qun Zhang and Feixue Li <i>Department of Geographical Information Science, Nanjing University</i></p>		
<b>LT1</b>	<b>Session 3.2</b>	<b>WebGIS</b>	<b>Program Committee</b>	<b>Jianya Gong</b>
	9:00 – 9:15	<p><b>Real-time Geospatial Information Service under a Sensor Web Environment</b> Nengcheng Chen <i>State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University</i></p>		
	9:15 – 9:30	<p><b>Web GIS Course &amp; Lab Design</b> Pinde Fu <i>Esri, Inc</i></p>		
	9:30 – 9:45	<p><b>Spatial Statistical Analysis with the Integrated Web Platform</b> Shuming Bao<sup>1</sup>, Chengfeng Zhang<sup>2</sup>, Bing She<sup>3</sup> and Xinyan Zhu<sup>4</sup> <sup>1</sup><i>China Data Center, University of Michigan, School of Business</i> <sup>2</sup><i>East China University of Science and Technology</i> <sup>3</sup><i>LIESMRS</i> <sup>4</sup><i>Wuhan University</i></p>		
	9:45 – 10:00	<p><b>Identifying Specific Spatial Tasks through Clustering and Geovisual Analysis</b> Ali Tahir<sup>1</sup>, Gavin McArdle<sup>2</sup>, and Michela Bertolotto<sup>3</sup></p>		

		<sup>1</sup> <i>School of Computer Science and Informatics, University College Dublin</i> <sup>2</sup> <i>National Centre for Geocomputation National University of Ireland Maynooth</i> <sup>3</sup> <i>School of Computer Science and Informatics, University College Dublin</i>		
	10:00 – 10:15	<b>Geospatial Service Web: Towards Integrated Cyberinfrastructure for GIScience</b> Jianya Gong and Huayi Wu <i>State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University</i>		
LT6	Session 3.3	<b>Remote Sensing and Biogeography</b>	<b>Program Committee</b>	<b>Le Wang</b>
	9:00 – 9:15	<b>Assessment of harm degree of Crofton weeds invasion in Southwest China with NDVI</b> Lizhao Wang <sup>1,2</sup> , Jingjing Peng <sup>2</sup> , Suhong Liu <sup>1*</sup> , Qiang Liu <sup>2,3</sup> , and Yimin Li <sup>4</sup> <sup>1</sup> <i>School of Geography, Beijing Normal University</i> <sup>2</sup> <i>State Key Laboratory of Remote Sensing Science, Jointly Sponsored by the Institute of Remote Sensing Applications of Chinese Academy of Sciences and Beijing Normal University</i> <sup>3</sup> <i>College of Global Change and Earth System Science, Beijing Normal University</i> <sup>4</sup> <i>Institute of Geography, Department of Environment and Resource, Yunnan University</i>		
	9:15 – 9:30	<b>Application of Fractal Theory in Assessing Chlorophyll Content Using Hypersectral Data</b> Yanfang Xiao, Demin Zhou*, and Huili Gong <i>Key Laboratory of 3D Information Acquisition and Application, Ministry of Education Capital Normal University</i>		
	9:30 – 9:45	<b>Remote Sensing Recognition, Concentration Classification and Dynamic Analysis of Algal Blooms in Dianchi Lake Based on MODIS Data</b> Meie Pan and Kun Yang <i>GIS Technology Research Center of Resource and Environment in Western China, Ministry of Education</i>		
	9:45 – 10:00	<b>Classification of Bird Habitats in Poyang Lake Based on Landsat TM/ETM Images</b> Ping Yang and Xuehua Liu <i>Department of Environmental Science, School of Environment, Tsinghua University</i>		
	10:00 – 10:15	<b>Understanding Saltcedar Invasion with Remote Sensing</b> Le Wang, Amy Frazier, and Jose Silvan-Cardenas <i>Department of Geography, the State University of New York at Buffalo</i>		
	LT5	Session 3.4	<b>Spatial Accessibility of Health Services</b>	<b>Lan Mu and Xun Shi</b>
	9:00 – 9:15	<b>Is disproportionality an issue? – Examining the child protective services in Travis County, Texas</b> Sara Stefka Eaves and Yongmei Lu <i>Department of Geography, Texas State University</i>		
	9:15 – 9:30	<b>Measuring of Accessibility for Walking Behavior in Hilly Topography Community</b> Guibo Sun, Hui Lin, and Rongrong Li <i>Institute of Space and Earth Information Science, The Chinese University of Hong Kong</i>		
	9:30 – 9:45	<b>Determinations of Low Breast Screening Uptake Using Geographically Weighted Regression Model</b> Chen Chen <sup>1</sup> , Yu Wang <sup>1</sup> , Huabing Wang <sup>1</sup> , and Tao Cheng <sup>2</sup> <sup>1</sup> <i>Satellite Surveying and Mapping Application Centre, National Administration of Surveying, Mapping and Geoinformation</i> <sup>2</sup> <i>Department of Civil, Environmental and Geomatic Engineering, University College London</i>		

	9:45 – 10:00	<b>Integration of Spatial and Temporal Variations of OHCA Patients and Emergency Service Facilities for Evaluating Potential Locations of Automated External Defibrillators (AED) in High Populated Urban Settings</b> Tzai- Hung Wen , Yu-Shiuan Tsai , and Chung-Yuan Huang <i>Department of Geography, National Taiwan University</i>		
	10:00 – 10:15	<b>All Roads Lead to Rome? Building a Method Framework of Spatial Clustering for Geographic Health Disparities</b> Lan Mu, Ping Yin, and Wei Tu <i>Department of Geography, University of Georgia, Department of Geography, Georgia Southern University, Statesboro</i>		
		Discussant: Fahui Wang and Xun Shi		
<b>201</b>	<b>Session 3.5</b>	<b>Climate Change and Sea Level</b>	<b>Program Committee</b>	<b>Jeffress Gary and Xiao Cheng</b>
	9:00 – 9:15	<b>Long-term coastal changes detection system based on remote sensing and image processing around an island</b> Bouchahma Maged and Wanglin Yan <i>Yan Lab, Graduate School Of Media &amp; Governance, SFC Keio University</i>		
	9:15 – 9:30	<b>Sea level variations in the South China Sea inferred from altimetry and GRACE</b> Wei Feng <sup>1,2,3*</sup> , Min Zhong <sup>1,4</sup> , Hou-Ze Xu <sup>1,4</sup> , and Jean-Michel Lemoine <sup>3</sup> <sup>1</sup> State Key Laboratory of Geodesy and Earth's Dynamics, Institute of Geodesy and Geophysics, Chinese Academy of Sciences <sup>2</sup> Graduate University of Chinese Academy of Sciences <sup>3</sup> CNES/GRGS, <sup>4</sup> Institute of Geophysics, Huazhong University of Science and Technology		
	9:30 – 9:45	<b>Recent Antarctic Icecap Changes and Global-Regional Sea Level Rising</b> Rongxing Li <i>Center for Spatial Information Science and Sustainable Development</i>		
	9:45 – 10:00	<b>A Novel Feature-based and Application-oriented Approach to Marine Sub-bottom Acoustic Spatial Data Fusion</b> Xiaojun Jiang, Shaohua Ren, and Yongzhong Shi <i>Zhejiang Surveying Institute of Estuary and Coast</i>		
	10:00 – 10:15	<b>Variability and Local Impact of Sea Level Rise in Economically Sensitive Areas Dominated by Vertical Land Motion</b> Jeffress Gary <i>Geographic Information Science Program</i>		
<b>LT4</b>	<b>Session 3.6</b>	<b>Remote Sensing and GIS Modeling on Environmental Change</b>	<b>Program Committee</b>	<b>Bing Xu and Yong Tian</b>
	9:00 – 9:15	<b>Remotely sensed groundwater storage variations in Hai River Basin, China</b> Haili Xu <sup>1,2,3</sup> , Yun Pan <sup>1,2,3,*</sup> , Huili Gong <sup>1,2,3</sup> , and Demin Zhou <sup>1,2,3</sup> <sup>1</sup> Base of the State Laboratory of Urban Environmental Processes and Digital Modeling, Capital Normal University <sup>2</sup> MOE Key Lab of 3-D Information Acquisition and Application, Capital Normal University <sup>3</sup> Beijing Key Lab of Resources Environment and GIS, Capital Normal University		
	9:15 – 9:30	<b>Monitoring of drought by MERSI data</b> Xiang Li <sup>1*</sup> , Yuanyuan Wang <sup>2</sup> , Shihao Tang <sup>2</sup> , and Shuanghe Shen <sup>1</sup> <sup>1</sup> Department of Applied Meteorology , Nanjing University of Information Science & Technology <sup>2</sup> National Satellite Meteorological Center, China Meteorological Administration		

		9:30 – 9:45	<b>Using GIS-Based Hydrological Models to Study the Variation of Dissolved Organic Carbon in Major U.S. Rivers in Response to Climate Change</b> Yong Tian <i>Central Michigan University</i>		
		9:45 – 10:00	<b>High Resolution Estimation of Colored Dissolved Organic Carbon in River Plume Area</b> Qian Yu and Weining Zhu <i>University of Massachusetts-Amherst</i>		
		10:00 – 10:15	<b>The Multi-scale Comprehensive Observation and Study of Spatial-Temporal Properties of Aerosol in China</b> Xingfa Gu, Tianhai Cheng, and Hao Chen <i>Institute of Remote Sensing Applications, Chinese Academy of Sciences</i>		
10:15-10:40	<b>Level 1- 3</b>	<b>Tea Break</b>			
10:40-12:25	<b>LT1</b>	<b>Session 3.7</b>	<b>Cloud Computing</b>	<b>Chaowei Yang and Shaowen Wang</b>	<b>Chaowei Yang and Shaowen Wang</b>
		10: 40– 10:55	<b>A Tile-based Scalable Raster Data Management System Based on HDFS</b> Guangqing Zhang, Chuanjie Xie, and Lei Shi <i>State Key Laboratory of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences</i>		
		10:55 – 11:10	<b>Towards Cost-Effective Remotely Sensed Data Sharing System on Cloud</b> Yunqin Zhong and Jinyun Fang <i>Institute of Computing Technology, Chinese Academy of Sciences, Graduate University of Chinese Academy of Sciences</i>		
		11:10 – 11:25	<b>Development of the Parallel Library of General Meta-Algorithms of Spatial Statistics to Improvement Computation Efficiency</b> Lianfa Li, Jinfeng Wang, Maogui Hu, Yang Wang, Tiejun Liu, and Xiaozhou Li <i>State Key Laboratory of Resources and Environmental Information Systems, Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences</i>		
		11:25 – 11:40	<b>Nebula Cloud Computing Enhances NASA Earth Science Data Processing</b> Aijun Chen <sup>1</sup> , Long Pham <sup>2</sup> , and Steven Kempler <sup>2</sup> <sup>1</sup> <i>George Mason University</i> <sup>2</sup> <i>Goddard Earth Science Data and Information Services Center (GES DISC), NASA Goddard Space Flight Center, Center for Spatial Information Science and Systems (CSISS)</i>		
		11:40 – 11:55	<b>On the Use of Cloud Computing for Geospatial Workflow Applications</b> Xiaolu Ji, Bin Chen, Zhou Huang, Zhengwei Sui, and Yu Fang <i>Institute of Remote Sensing &amp; GIS, Peking University</i>		
		11:55 – 12:10	<b>Open Architecture for the Sharing of Heterogeneous Geographic Analysis Models</b> Yonning WEN, Guonian Lv, Songshan Yue and Di Hu <i>Key Laboratory of Virtual Geographic Environment (Ministry of Education), Nanjing Normal University</i>		
		12:10 – 12:25	<b>Efficient Interoperation of User-Generated Geospatial Model Based on Cloud Computing</b> Lian Duan <sup>1,2*</sup> , Baoqing Hu <sup>1</sup> , and Xinyan Zhu <sup>2</sup> <sup>1</sup> <i>Geography Information System Department, Guangxi Teachers Education University</i> <sup>2</sup> <i>State Key Laboratory of Information Engineering in Surveying, Mapping &amp; Remote Sensing, Wuhan University</i>		

LT6	<b>Session 3.8</b>	<b>Innovative Algorithms for Spatial Analysis</b>	<b>Program Committee</b>	<b>Ningchuan Xiao and Guoan Tang</b>
	10: 40– 10:55	<b>Accumulated Similarity Surface for Spatial Interpolation</b> Kang Yang, Yan-ming Chen, and Man-chun Li <i>Department of Geographic Information Science, School of Geographic &amp; Oceanographic Sciences, Nanjing University</i>		
	10:55 – 11:10	<b>An Automatic Sorting Approach of Surface Bundle Based on the Shared Space Curve</b> Changbin Yu <i>School of Resource and Environment Science, Wuhan University</i>		
	11:10 – 11:25	<b>TOPV2R: A Topology Preserving Vector to Raster Transfer Algorithm</b> Dingmou Li and Ningchuan Xiao <i>Archonix Systems, LLC, Marlton, Department of Geography, The Ohio State University</i>		
	11:25 – 11:40	<b>Research on Parallel Algorithm for Line Rasterization Based on Master-Slave Mode</b> Tao Huang, Man-chun Li, Xiao-hui Jiang, Zhi-bin Jin, Shuai Zhang, and Zhen-jie Chen <i>Department of Geographical Information Science, Nanjing University</i>		
	11:40 – 11:55	<b>Automated Plotting Technology Research for the Point Symbols in the Multi-core Environment</b> Zhang Zhen <i>Institute of Computing Technology, Chinese Academy of Sciences</i>		
	11:55 – 12:10	<b>A comparative study of several Taylor expansion methods on error propagation</b> Jie Xue and Jiang-Hong Ma <i>Department of Mathematics and Information Science, Chang'an University</i>		
	12:10 – 12:25	<b>A Vector Data Steganography and Reduction Method by Interpolation and Prediction</b> Chi Zhang, Guonian Lv*, Anbo Li, and Jing Dai <i>Key Laboratory of Virtual Geography Environment Nanjing Normal University, College of Geographic Science, Nantong University</i>		
LT5	<b>Session 3.9</b>	<b>Trajectory and Transport</b>	<b>Xiang Li and Yue Liu</b>	<b>Xiang Li and Yue Liu</b>
	10: 40– 10:55	<b>Impacts of the High-speed Rail Network on Regional Accessibility in China</b> Rongrong Li <sup>1</sup> , Hui Lin <sup>1</sup> , Lijie Lin <sup>2</sup> <sup>1</sup> <i>Institute of Space and Earth Information Science, The Chinese University of Hong Kong</i> <sup>2</sup> <i>Department of Geography and Resource Management, The Chinese University of Hong Kong</i>		
	10:55 – 11:10	<b>Real-time Identifying Traffic Congestion by Using Vehicle Trajectory Data</b> Handong Wang <sup>1,2,3</sup> , Yang Yue <sup>1,2,3*</sup> , and Qingquan Li <sup>1,2,3</sup> <sup>1</sup> <i>Transportation Research Center, Wuhan University</i> <sup>2</sup> <i>State Key Lab of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University</i> <sup>3</sup> <i>Engineering Research Center for Smart Acquisition and Applications of Spatiotemporal Data, Ministry of Education, Wuhan University</i>		
	11:10 – 11:25	<b>An Efficient Approach to Visual Exploration of Massive Vehicle Trajectory Data</b> Jing Sun and Xiang Li <i>Key Laboratory of Geographical Information Science, East China Normal University</i>		
	11:25 – 11:40	<b>Deriving Delay Time of Traffic Flow around Intersections from Vehicle Trajectory Data</b> Minyue Zhao and Xiang Li <i>Key Laboratory of Geographical Information Science, East China Normal University</i>		

	11:40 – 11:55	<b>Estimating Turn Delays in City Road Network with Real-time Collected Floating Car Data</b> Hengcai Zhang, Feng Lu, and Xiliang Liu <i>State Key Laboratory of Resources and Environmental Information System, Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences</i>		
	11:55 – 12:10	<b>Evaluating Road Selectivity of Urban-Trip based on Dynamic Betweenness Centrality</b> Liang Zhou, Feng Lu, and Hengcai Zhang <i>State Key Laboratory of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences</i>		
	12:10 – 12:25	<b>An Efficient Approach to Building Image-based Road Network Model</b> Xiang Li*, Yujie Hu, Jing Sun, and Jun Xie <i>Key Laboratory of Geographical Information Science, East China Normal University</i>		
201	<b>Session 3.10</b>	<b>Contemporary Urban and Regional Spatial Structures</b>	<b>Program Committee</b>	<b>Jukka Krisp and Xiaobai Yao</b>
	10: 40– 10:55	<b>Information Modeling and Visualization of Urban Material Flows</b> Chen Zhong and Stefan MüllerArisona <i>Future Cities Laboratory, Singapore-ETH Centre, ETH Zurich</i>		
	10:55 – 11:10	<b>A multi-objective assessment of road ranking in Blue Ridge Parkway regional transportation network</b> Xiaobai Yao <i>Department of Geography, University of Georgia</i>		
	11:10 – 11:25	<b>A Research on the Thermal Environment in the center of Tokyo Metropolitan Area based on the Block Structure from Edo period</b> Chika Takatori and Mikiko Ishikawa <i>Environmental and Design Laboratory of the Urban Planning Department, The University of Tokyo</i>		
	11:25 – 11:40	<b>A First Study on Road Database Update Using OpenStreetMap Data</b> Lian Xiong, Qingwu Hu, and Jie Shan <i>School of Remote Sensing and Information Engineering, Wuhan University</i>		
	11:40 – 11:55	<b>The Comprehensive Evaluation and Spatial Analysis of Jiangsu’s Population Quality</b> Mengmeng Yang and Zhibin Jin <i>School of Geographic and Oceanographic Sciences, Nanjing University</i>		
	11:55 – 12:10	<b>Location-based Event Detection from Open Street Map Data; A Case Study in Germany and China</b> Khatereh Polous, Jukka Krisp, and Liqiu Meng <i>Department of Cartography, Civil Engineering Faculty, Technische Universität München</i>		
	12:10 – 12:25	<b>The measurement study of fire-fighting spatial accessibility in Beijing based on M2FCA</b> Xiaokun Niu <sup>12</sup> , Xiaojuan Li <sup>12</sup> , Yonghua Sun <sup>12</sup> , Nian Peng <sup>12</sup> , and Fahui Wang <sup>3</sup> <sup>1</sup> <i>Beijing Key Lab of Resources Environment and GIS, Capital Normal University</i> <sup>2</sup> <i>College of Resources, Environment and Tourism, Capital Normal University</i> <sup>3</sup> <i>Department of Geography &amp; Anthropology, Louisiana State University, Baton Rouge</i>		



LT4	Session 3.11	GIS and Environmental Health	Lan Mu and Xun Shi	Lan Mu and Minhe Ji	
	10:40–10:55	<b>A Study of Air Quality Impact on Upper Respiratory Tract Diseases using Geographic Information System</b> Hueyhong Hsieh <sup>1</sup> , Yi-Hsiung Lin <sup>2</sup> , and Shin-jen Cheng <sup>3</sup> <sup>1</sup> Department of Leisure Management, Taiwan Shoufu University <sup>2</sup> Department of Health and Beauty Management, Taiwan Shoufu University <sup>3</sup> Department of Leisure Management, Taiwan Shoufu University			
	10:55 – 11:10	<b>Monitoring and Visualizing Radiation Air-dose by Car-born Survey</b> Tomoyuki Furutani <sup>1*</sup> , Keisuke Uehara <sup>2</sup> , and Jun Murai <sup>2</sup> <sup>1</sup> Internet and Society Laboratory (Scanning the Earth Project), Faculty of Policy Management, Keio University <sup>2</sup> Internet and Society Laboratory (Scanning the Earth Project), Faculty of Environment and Information Studies, Keio University			
	11:10 – 11:25	<b>New Models and Efficient Algorithms for Hazard Detection</b> Wenqiju <sup>1</sup> , Chenglin Fan <sup>2</sup> , Shuguang Liu <sup>2</sup> , and Jinfei Liu <sup>2</sup> <sup>1</sup> Institute of Computing Technology, Chinese Academy of Sciences <sup>2</sup> Shenzhen Institutes of Advanced Technology			
	11:25 – 11:40	<b>Multi-model Ensemble Air Quality Forecast System Based on GIS</b> Rei Liu <sup>1,2</sup> , Xiaolong Fan <sup>3</sup> , Aimin Luo <sup>4</sup> , Tao Xie <sup>1,5</sup> , and Xin Yao <sup>5</sup> <sup>1</sup> Institute of Resources and Environment Science, MAPUN <sup>2</sup> School of Geography, Beijing Normal University <sup>3</sup> Environmental Information Center of Shijiazhuang <sup>4</sup> Environmental Information Center of Chengde <sup>5</sup> China Sciences MapUniverse Technology Co., Ltd.			
	11:40 – 11:55	<b>3D noise Mapping of Urban Road Traffic Noise in Aoti Area, Nanjing</b> Xiaoyan LIU Ministry key laboratory for Virtual Geographic Environments, Nanjing Normal University			
	11:55 – 12:10	<b>Spatial Association between Low Birth Weight and Arsenic Exposure from Groundwater in New Hampshire, US</b> Xun Shi Dartmouth College			
12:25-2:00	Level 1-3	<b>Lunch Break</b>			
2:00-3:45	LT6	Session 3.12	Progress in Environmental Remote Sensing	Program Committee	Jianhua Gong and Yuanzhi Zhang
		2:00 – 2:15	<b>An analysis to global albedo time series derived from AVHRR data and MODIS data</b> Qiang Liu <sup>1,2*</sup> , Lizhao Wang <sup>1,2</sup> , Nanfeng Liu <sup>2</sup> , Ying Qu <sup>1,2</sup> , and Shunlin Liang <sup>1,3</sup> <sup>1</sup> College of Global Change and Earth System Science, Beijing Normal University <sup>2</sup> State Key Laboratory of Remote Sensing Science, Jointly Sponsored by the Institute of Remote Sensing Applications of Chinese Academy of Sciences and Beijing Normal University <sup>3</sup> Department of Geography, University of Maryland, College Park		

	2:15 – 2:30	<b>Refinement of GSMAp Precipitation Product by the Bayesian Maximum Entropy Method</b> Gongqi Zhou <sup>1</sup> and Xiaotong Zhang <sup>2</sup> <i><sup>1</sup>School of Geography and Remote Sensing, Beijing Normal University, State Key Laboratory of Remote Sensing Science, Beijing Normal University</i> <i><sup>2</sup>College of Global Change and Earth System Science, Beijing Normal University</i>		
	2:30 – 2:45	<b>Object-Oriented Segmentation and Classification of wetlands within the Khalong-la-Lithunya catchment, Lesotho, Africa</b> Peng Gao <sup>1</sup> , Carl C. Trettin <sup>2</sup> , and Subhajit Ghoshal <sup>1</sup> <i><sup>1</sup>Department of Geography, University of South Carolina, Columbia</i> <i><sup>2</sup>Center for Forested Wetlands Research, US Forest Service, Cordesville</i>		
	2:45 – 3:00	<b>Change detection of land cover in Lushan Based on TM remote sensing</b> Wen Zhang, Qun Zhang, Manchun Li, Lihua Tong, Yanming Chen, and Liang Cheng <i>Department of Geographical Information Science, Nanjing University</i>		
	3:00 – 3:15	<b>Visual Data Exploration of Space-Time Characteristics of Mesoscale Eddies in the South China Sea: A Cube-Based Approach</b> Jiawei Yi, Yunyan Du and Chenghu Zhou <i>State Key Laboratory of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences</i>		
	3:15 – 3:30	<b>Swarm Intelligence Based Multi-sensor Image Registration Integrating Spatial and Mutual Information</b> Jiayong Liang, Xiaoping Liu, Kangning Huang, Xia Li <i>School of Geography and Planning, Sun Yat-sen University</i>		
LT5	Session 3.13	<b>Understanding Human Mobility Patterns through Mining Trajectories Data</b>	<b>Yu Liu and Bin Jiang</b>	<b>Yu Liu and John Radke</b>
	2:00 – 2:15	<b>Exploring spatiotemporal characteristics of intra-urban trips using metro smartcard records</b> Yongxi Gong <sup>1,2</sup> , Yu Liu <sup>3</sup> , Yaoyu Lin <sup>1,4</sup> , Jian Yang <sup>2</sup> , Zhongyuan Duan <sup>5</sup> , and Guicai Li <sup>2*</sup> <i><sup>1</sup>School of Urban Planning and Management, Harbin Institute of Technology Shenzhen Graduate School</i> <i><sup>2</sup>Shenzhen Key Lab of Recycling Economy, Peking University Shenzhen Graduate School</i> <i><sup>3</sup>Institute of Remote Sensing &amp; Geographical Information Systems, Peking University</i> <i><sup>4</sup>State Key Laboratory of Subtropical Building Science, South China University of Technology</i> <i><sup>5</sup>Shenzhen Urban Transport Planning Center CO. LTD</i>		
	2:15 – 2:30	<b>Bus Landscapes</b> Ying Long <i>Beijing Institute of City Planning</i>		
	2:30 – 2:45	<b>Improving Monte Carlo Localization Algorithm Using Genetic Algorithm in Mobile WSNs</b> Yuehu Liu, Bin Chen, YuBin Xu, ZhiHui Li, and Yu Fang <i>Institute of Remote Sensing and Geographic Information System, Peking University</i>		
	2:45 – 3:00	<b>Labeling User Characteristics from Mobile Phone Data</b> Bo Hu <sup>1</sup> , Jia Chen <sup>1</sup> , Yang Yue <sup>1*</sup> , Qingquan Li <sup>1</sup> , and Xiaoqing Zuo <sup>2</sup> <i><sup>1</sup>Engineering Research Center for Smart Acquisition and Applications of Spatiotemporal Data, Ministry of Education; State Key Lab of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University</i> <i><sup>2</sup>Faculty of Land Resource Engineering, Kunming University of Science and Technology</i>		
	3:00 – 3:15	<b>The Development of Jinan Emergency System Based on“3G”Technology</b>		

		Shang Dong, Yingxia Pu, Wenli Yu, and Zhibin Jin <i>School of Geographic and Oceanographic Sciences, Nanjing University</i>		
	3:15 – 3:30	<b>Assessing Transportation Networks in the Sacramento-San Joaquin Delta: Flood Simulations and Emergency Responder Accessibility</b> John Radke, Howard Foster, Conor Henley, Tessa Bernhardt, Kristen Carnarius, and Rachael Marzion <i>Department of Landscape Architecture and Environmental Planning, University of California</i>		
	3:30 – 3:45	<b>Size and Geographic Constraints on Inter-city Mobile Communication</b> Chaogui Kang, Yu Liu, and Yi Zhang <i>Institute of Remote Sensing and Geographical Information Systems, Peking University</i>		
201	Session 3.14	<b>Monitoring and Modeling Land Use II</b>	<b>Program Committee</b>	<b>Xia Li and Xiaoping Liu</b>
	2:00 – 2:15	<b>Data assimilating by using remote sensing data and cellular automata for change detection in the Pearl River Delta</b> Xia Li, Yihan Zhang, Xiaoping Liu, and Yimin Chen <i>School of Geography and Planning, and Guangdong Key Laboratory for Urbanization and Geo-simulation, Sun Yat-sen University</i>		
	2:15 – 2:30	<b>Building-based urban land use classification from vector databases in Manchester, UK</b> Masroor Hussain <sup>1*</sup> , Robet Barr <sup>2</sup> , and Dongmei Chen <sup>1</sup> <sup>1</sup> <i>Laboratory of Geographic Information and Spatial Analysis (LaGISA), Department of Geography, Queen's University</i> <sup>2</sup> <i>Department of Geography, The University of Manchester</i>		
	2:30 – 2:45	<b>Identification of Key Changed Land Use Type in LUCC: A Case Study of Guishui River Basin</b> Pengfei Wu <sup>123</sup> , Huili Gong <sup>123*</sup> , and Demin Zhou <sup>123</sup> <sup>1</sup> <i>Base of the State Laboratory of Urban Environmental Processes and Digital Modeling</i> <sup>2</sup> <i>Key Laboratory of 3D Information Acquisition and Application, Ministry of Education</i> <sup>3</sup> <i>College of Resource Environment and Tourism, Capital Normal University</i>		
	2:45 – 3:00	<b>Monitoring land use/land cover changes of Kunming city based on remote sensing technology and spatial metrics</b> Ke Zhang <sup>1</sup> , Yaolong Zhao <sup>1*</sup> , and Hong Zhang <sup>2</sup> <sup>1</sup> <i>School of Geography, South China Normal University</i> <sup>2</sup> <i>School of Urban Management and Resources Environment, Yunnan University of Finance and Economics</i>		
	3:00 – 3:15	<b>Urban Land Use / Land Cover Classification by Fusing Optical and SAR Remote Sensing Images</b> Hongsheng Zhang, Yuanzhi Zhang, and Hui Lin <i>Institute of Space and Earth Information Science, The Chinese University of Hong Kong</i>		
	3:15 – 3:30	<b>GIS-based Cluster Analysis on Urban Growth Patterns of Guangzhou Megacity</b> Huang Zhen <sup>1*</sup> , Lin Jian <sup>2</sup> , and Huang Bo <sup>2</sup> <sup>1</sup> <i>Institute of Space and Earth Information Science The Chinese University of Hong Kong</i> <sup>2</sup> <i>Department of Geography and Resource Management The Chinese University of Hong Kong</i>		
	3:30 – 3:45	<b>An Artificial Immune System for multi-objective land use allocation (AIS-MOLA)</b> Kangning Huang, Xiaoping Liu, Xia Li, and Jiayong Liang <i>School of Geography and Planning, Sun Yat-sen University</i>		
LT1	Session 3.15	<b>Terrain Analysis</b>	<b>Program Committee</b>	<b>Yuanzhi Yao</b>
	2:00 – 2:15	<b>Towards a Seamless Integration for Spatial Objects and Topography</b> Jiateng Guo <sup>1*</sup> , Lixin Wu <sup>1,2</sup> , Yizhou Yang <sup>1</sup> , Rongbin Zhang <sup>1</sup> <sup>1</sup> <i>Institute for Geo-informatics &amp; Digital Mine Research, Northeastern University</i> <sup>2</sup> <i>Academy of Disaster Reduction and Emergency Management, Beijing Normal University</i>		

	2:15 – 2:30	<b>A GPU- Accelerated Method for High Accuracy Surface Modeling</b> ChangQing Yan <sup>1</sup> and TianXiang Yue <sup>2*</sup> <i>Institute of Geographic Science and Natural Resources Research, State Key Laboratory of Resources and Environment Information System, Department of Information Engineering, Shandong University of Science and Technology</i>		
	2:30 – 2:45	<b>Digital terrain analysis for detecting impact craters on the lunar surface</b> Yiqun Xie <sup>1</sup> , Guoan Tang <sup>1,2*</sup> , Shijiang Yan <sup>1,2</sup> , and Hui Lin <sup>3</sup> <sup>1</sup> <i>School of Geographic Science, Nanjing Normal University</i> <sup>2</sup> <i>Key Laboratory of Virtual Geographical Environment of Ministry of Education, Nanjing Normal University</i> <sup>3</sup> <i>Institute of Space and Earth Information Science, Chinese University of Hong Kong</i>		
	2:45 – 3:00	<b>High-precision DEM production in complex urban area using LiDAR data</b> Wenquan Han <sup>1</sup> , Yongquan Li <sup>2</sup> , and Lei Chen <sup>3</sup> <sup>1</sup> <i>School of Geographic &amp; Oceanographic Sciences Nanjing University, Nanjing Institute of Surveying</i> <sup>2</sup> <i>Mapping &amp; Geotechnical Investigation, Co. Ltd.</i> <sup>3</sup> <i>General Engineer's Office Nanjing Institute of Surveying, Mapping &amp; Geotechnical Investigation, Co. Ltd. Technique Management Department</i> <i>Nanjing Institute of Surveying, Mapping &amp; Geotechnical Investigation, Co. Ltd.</i>		
	3:00 – 3:15	<b>A conceptual model for submarine feature description and generalisation in nautical chart production</b> Jingya Yan <sup>1,2*</sup> , Eric Guilbert <sup>2</sup> , and Eric Saux <sup>1</sup> <sup>1</sup> <i>Naval Academy Research Institute, Lanvéoc-Poulmic</i> <sup>2</sup> <i>Department of Land Surveying and Geo-Informatics, The Hong Kong Polytechnic University</i>		
	3:15 – 3:30	<b>Multi-type Sweeping for Improving the Efficiency of Flow Accumulation Calculation</b> Yuanzhi Yao <sup>1</sup> , Heping Tao <sup>1</sup> , and Xun Shi <sup>2</sup> <sup>1</sup> <i>Center for Digital Mountain and Remote Sensing Application, Institute of Mountain Hazards and Environment, CAS</i> <sup>2</sup> <i>Department of Geography, DartmouthCollege, Hanover</i>		
LT4	Session 3.16	<b>ChinaCover: Land Cover Mapping with Remote Sensing and Fieldworks</b>		<b>Bingfang Wu and Jinsong Chen</b>
	2:00 – 2:15	<b>ChinaCover: Methodology and features</b> Bingfang Wu, Lei Zhang, Quanzhi Yuan, Kai Yin, Qiang Xin, and Xingfeng Zhao <i>Laboratory for Agriculture and Ecology, Institute of Remote Sensing Applications, Chinese Academy of Sciences</i>		
	2:15 – 2:30	<b>ChinaCover: Auto-geocorrection of HJ time series data</b> Ainong Li <sup>1*</sup> , Jinhu Bian <sup>1</sup> , Huaan Jin <sup>1</sup> , Guangbin Lei <sup>1</sup> , Jiyan Wang <sup>1</sup> , Bingfang Wu <sup>2</sup> <sup>1</sup> <i>Institute of Mountain Hazards and Environment, Chinese Academy of Sciences</i> <sup>2</sup> <i>Institute of Remote Sensing Applications, Chinese Academy of Sciences</i>		
	2:30 – 2:45	<b>ChinaCover: Classification and validation Methodology</b> Lei Zhang, Bingfang Wu, Quanzhi Yuan, Kai Yin, Qiang Xin, and Xingfeng Zhao <i>Laboratory for Agriculture and Ecology, Institute of Remote Sensing Applications, Chinese Academy of Sciences</i>		
	2:45 – 3:00	<b>ChinaCover: Study on synergistic use of optical and microwave remote sensing data for land cover mapping</b> Jinsong Chen and Hongzhong Li <i>Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences</i>		
	3:00 – 3:15	<b>ChinaCover: Linear Forest Detection Methodology</b> Xinfang Yu <sup>1,2*</sup> , Zhengxing Wang <sup>1,2</sup> , Yaqin Wang <sup>1,2</sup> , Shikuan Wang <sup>1,2</sup> , and Zheng Li <sup>1,2</sup>		

			<sup>1</sup> Data Center for Resources and Environmental Sciences, Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences State Key Laboratory of Resources and Environmental Information System		
		3:15 – 3:30	<b>ChinaCover: A case study in Miyun reservoir area</b> Quanzhi Yuan, Bingfang Wu, Lei Zhang, and Xiaosong Li Institute of Remote Sensing Applications, Chinese Academy of Sciences		
		3:30 – 3:45	<b>Data pre-process and fusing system based on supercomputer technology for China Cover</b> Bo Chen, Bingfang Wu, Xiaosong Li, and Leidong Yang Institute of Remote Sensing Applications, Chinese Academy of Sciences		
3:45-4:10	<b>Level 1 &amp; 3</b>	<b>Tea Break</b>			
4:10-5:15	<b>LT1</b>	<b>Session 3.17</b>	<b>Panel Discussion- Industry Innovations and Technology Transfer</b>		<b>Vincent Tao, Yongmin Yan and Lin Liu</b>
		<ul style="list-style-type: none"> <li>• Leading Talk: “Future Perspectives in Innovative Applications of SoLoMo (Social + Location+ Mobile)” by Vincent Tao</li> <li>• Announcement of the establishment of “Industrial Foundation of Geographic Information”</li> </ul>			
5:15-5:30	<b>LT1</b>	<b>Closing Session</b>			<b>Xun Shi and Hui Lin</b>