

The 19th International Conference on Geoinformatics

June 24-26, 2011

Shanghai, China

Conference Program

## Co-Organizers:

The Key Lab of Geographical Information Science, Ministry of Education, East China Normal University

The Lab for Urban and Regional Analysis, East China University of Science and Technology

The International Association of Chinese Professionals in Geographic Information Sciences (CPGIS)

## Co-Sponsors:

IEEE Geoscience and Remote Sensing Society (IEEE GRSS)

School of Resource and Environmental Science, East China Normal University

Shanghai Urban Development Information Research Center

The Geographical Society of Shanghai

Business School, East China University of Science and Technology

International Center for Risk Governance Research in Coastal Urban Region, East China Normal University

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# Useful Information

## Location of All Conference Sites

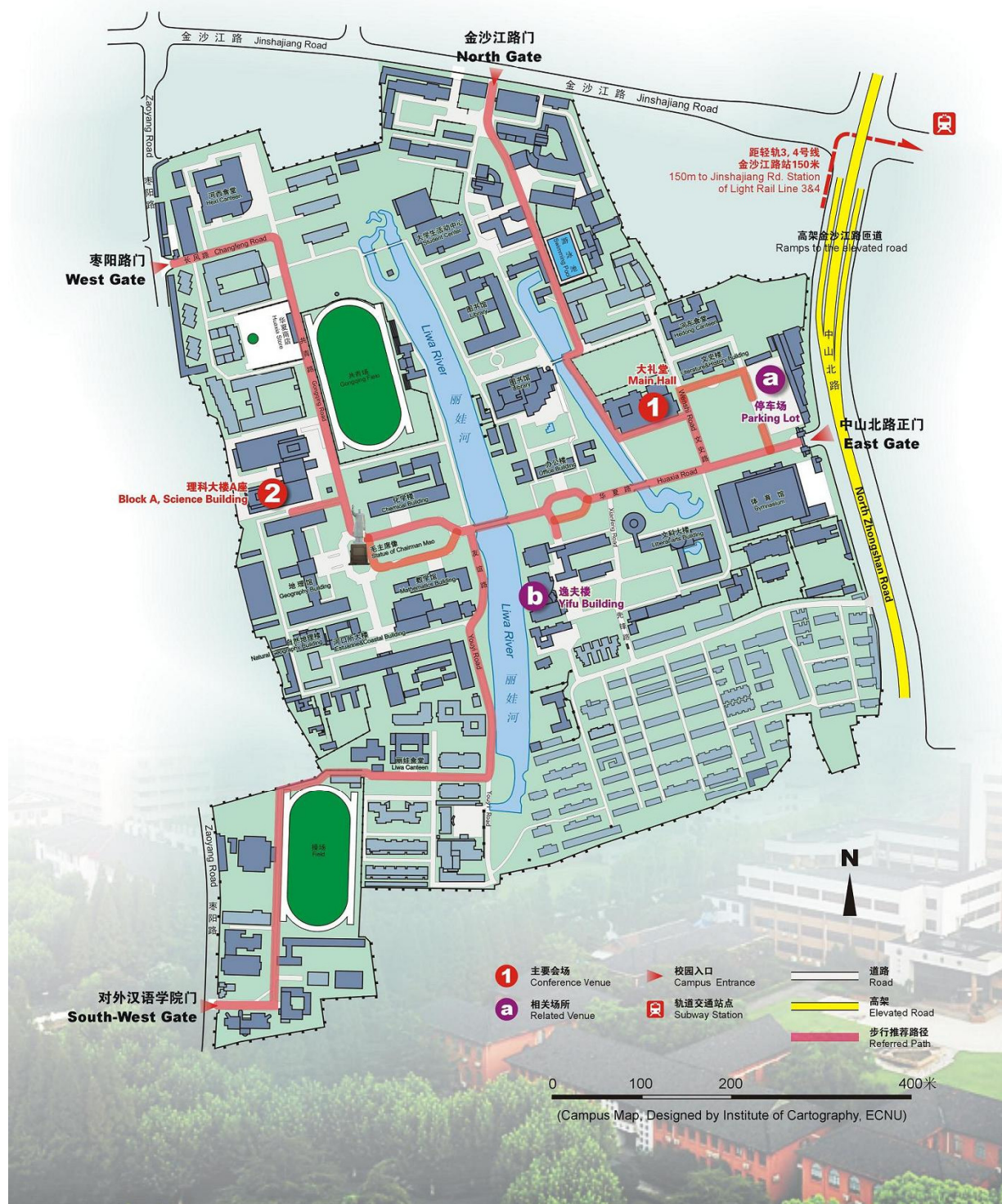


抵达各酒店的距离 (米) The Distance to Each Hotel (m):



(Location Map of All Conference Sites, Designed by Institute of Cartography, ECNU)

## Campus Map of East China Normal University (ECNU)



**Note: All sessions on June 24 are held in the campus.**

**Floor Plan of Conference Rooms in Marriott Hotel  
Changfeng Park (MHCP)**



**Note: All sessions on June 25 and 26 are held in the hotel.**

## **Registration Site and Time**

<b><u>Day</u></b>	<b><u>Time</u></b>	<b><u>Location</u></b>
June 23	14:00-20:00	Lobby, 1/F, MHCP
June 24	08:00-16:00	Main Hall, ECNU
June 25	08:00-16:00	Lobby, 3/F, MHCP
June 26	08:00-16:00	Lobby, 3/F, MHCP

## **Traffic Guidance**

**East China Normal University (ECNU)** 3663 Zhongshanbei Road, Shanghai

**华东师范大学 上海市 中山北路 3663 号**

Besides taking taxi, you are also recommended to take **subway** (<http://www.shmetro.com/>). The nearest subway station is **Jinshajiang Station** of Line 3 and Line 4 (Labeled in Section “**Location of All Conference Sites**”). The walking distance between the station and the **East Gate of ECNU** (Labeled in Sections “**Location of All Conference Sites**” and “**Campus Map of East China Normal University**”) is about 500 meters. There are subway stations in airports and railway stations of Shanghai.

**Marriott Hotel Changfeng Park (MHCP)** 158 Daduhe Road, Shanghai

**新发展亚太万豪酒店 上海市 大渡河路 158 号**

You are recommended to take taxi (<http://www.marriott.com/shacp>). You may also take subway. The nearest subway station is **Loushanguan Station** of Line 2 (Labeled in Section “**Location of All Conference Sites**”). The walking distance between the station and the Hotel is about 1800 meters.



### **Shuttle Bus Service**

<b><u>Day</u></b>	<b><u>Time</u></b>	<b><u>From</u></b>	<b><u>To</u></b>
June 24	08:00	MHCP	ECNU
	18:00	Parking Lot, ECNU	Jinsha Hotel
	20:30	Jinsha Hotel	MHCP
June 25	08:00-08:20	Parking Lot, ECNU	MHCP
& 26	17:30-18:00	MHCP	ECNU

### **Tea Break and Lunch**

	<b><u>Day</u></b>	<b><u>Time</u></b>	<b><u>Location</u></b>
Tea Break	June 24	10:00-10:30	Main Hall, ECNU
		15:10-15:40	
	June 25 & 26	10:00-10:30	Lobby, 3/F, MHCP
		15:00-15:30	
Lunch	June 24	12:00-13:30	Yifu Building, ECNU
	June 25 & 26	12:00-13:30	Fuyuan Café, 1/F, MHCP

# Program Overview

Day	Time	Program									Venue
23-Jun	Morning	Pre-conference tutorial: Modeling Urban Complexity and Hierarchy ( <b>Room A510, Science Building</b> )									<b><u>East China Normal University (ECNU)</u></b>
	Afternoon										
24-Jun	Morning	Opening ceremony ( <b>Main Hall</b> )									
		Keynote session ( <b>Main Hall</b> )									
	Afternoon	Plenary sessions I & II and Special event ( <b>Main Hall</b> )					Student paper competition ( <b>510, Block A, Science Building</b> )				
		Evening	Welcome dinner ( <b>Floors 1 &amp; 2</b> )								
		Parallel oral sessions								Poster sessions	<b><u>Marriott Hotel Changfeng Park (MHCP)</u></b>
		<b><u>Room A</u></b>	<b><u>Room B</u></b>	<b><u>Room C</u></b>	<b><u>Room D</u></b>	<b><u>Room E</u></b>	<b><u>Room F</u></b>	<b><u>Room G</u></b>	<b><u>Room H</u></b>	<b><u>Lobby 3/F</u></b>	
25-Jun	Morning	OS01	OS03	OS05	OS07	OS09	OS11	OS13	OS15	PS01	
		OS02	OS04	OS06	OS08	OS10	OS12	OS14	OS16	PS02	
	Afternoon	OS17	OS19	OS21	OS23	OS25	OS27	OS29	OS31	PS03	
		OS18	OS20	OS22	OS24	OS26	OS28	OS30	OS32	PS04	
26-Jun	Morning	OS33	OS35	OS37	OS39	OS41	OS43	OS45	OS47	PS05	
		OS34	OS36	OS38	OS40	OS42	OS44	OS46	OS48	PS06	
	Afternoon	OS49	OS51	OS53	OS55	OS57	OS59	OS61	OS63	PS07	
		OS50	OS52	OS54	OS56	OS58	OS60	OS62	OS64	PS08	

## June 23

### **Registration (14:00-20:00)**

Venue: Lobby, 1/F, MHCP

Note: Please refer to Section “Useful Information -> Registration Site and Time” for other registration sites and time.

### **Pre-conference tutorial: Modeling Urban Complexity and**

### **Hierarchy (08:45-17:30)**

Instructors: **Dr. Bin Jiang and Dr. Yanguang Chen**

Venue: **510, Block A, Science Building, ECNU**

<b>Time</b>	<b>Topics</b>	<b>Instructor</b>
08:45 - 09:00	Overview of the tutorial	Bin Jiang and Yanguang Chen
09:00 - 10:30	Introduction to self-organized cities	Yanguang Chen
10:30 - 11:00	Tea break	
11:00 - 12:30	Scaling, power laws and emergence in urban evolution	Yanguang Chen
12:30 - 13:30	Lunch break	
13:30 - 15:00	Complex network theories and modeling large geographic networks	Bin Jiang
15:00 - 15:30	Tea break	
15:30 - 17:00	Cellular automata and agent-based modeling of urban and regional systems	Bin Jiang
17:00 - 17:30	Wrap up	Bin Jiang and Yanguang Chen

# June 24

## Opening Ceremony (08:30-09:00)

Venue: **Main Hall, ECNU**

Chair: **Dr. Wei Gao**

### Welcome addresses given by:

**Dr. Lizhong Yu** Co-Chair of International Steering Committee, President of East China Normal University

**Dr. Baijun Wu** Dean of Business School, East China University of Science and Technology

**Dr. Xun Shi** President of The International Association of Chinese Professionals in Geographic Information Sciences

**Dr. Michael Goodchild** Honorary Chair

**Dr. Guanhua Xu** Honorary Chair

## Keynote Session (09:00-12:00)

Venue: **Main Hall, ECNU**

Chair: <b>Dr. Lizhong Yu</b>		
9:00-9:30	<b>Dr. Guanhua Xu</b> Ministry of Science and Technology	Global Changes and Digital Earth
9:30-10:00	<b>Dr. Michael Goodchild</b> University of California, Santa Barbara	GIScience and Social Networks
10:00-10:30	Tea break	
Chair: <b>Dr. Xun Shi</b>		
10:30-11:00	<b>Dr. Hui Lin</b> The Chinese University of Hong Kong	Virtual Geographic Environments: Feeling it in Person and Knowing it beyond Reality
11:00-11:30	<b>Dr. Simon Thompson</b> ESRI	Global Economies, Local Impacts – Why Geography Matters to Business
11:30-12:00	<b>Dr. Vincent Tao</b> Global Earth Holding & PPLive Corporation	New Perspectives of Location-based services (LBS) for Mobile Internet Applications



**Plenary Session I (13:30-15:10)**Venue: **Main Hall, East China Normal University**Chair: **Dr. Hui Lin**

13:30-13:55	<b>Dr. A-Xing Zhu</b> UW Madison	High Performance Computing, CyberGIS and Digital Divide
13:55-14:20	<b>Dr. Chaowei Yang</b> George Mason University	Spatial Cloud Computing
14:20-14:45	<b>Dr. Diansheng Guo</b> University of South Carolina	Spatio-Temporal Analysis and Visualization of Movements and Trajectories
14:45-15:10	<b>Dr. Shuming Bao</b> University of Michigan	Spatial Intelligence Analysis

Tea break (15:10-15:40)

**Plenary Session II (15:40-17:20)**Venue: **Main Hall, East China Normal University**Chair: **Dr. Yehua Wei**

15:40-16:05	<b>Dr. Peng Gong</b> UC Berkeley	Mapping Global Changes
16:05-16:30	<b>Dr. Jun Chen</b> National Geomatics Center of China	Global Land Cover Mapping
16:30-16:55	<b>Dr. Weining Xiang</b> East China Nominal University	From the Ecology in Cities to the Ecology of Cities: what does the paradigm shift in urban ecosystem studies mean to the GIS community?
16:55-17:20	<b>Dr. Qihao Weng</b> Indiana State University	Urban Remote Sensing: Recent Advances and Future Opportunities

**Special Event (17:20-17:40)**Venue: **Main Hall, East China Normal University**Chair: **Dr. Shuming Bao**

- Announce site selection result of GeoInformatics 2012
- Announce student paper competition result

**Special Session: Student Paper Competition (13:30-17:00)**Venue: **Room A510, Science Building, East China Normal University**Co-Chairs: **Bo Huang & Yan Liu**

13:30-13:45	Zoning Farmland Protection Areas by integrating GIS, Land Allocation Model and Urban Growth Model	Yimin Chen*, Xia Li, Zhangzhi Tan, Yilun Liu, Shujie Wang, Chunhua Lao
13:45-14:00	LiDAR-based 3D FEM Geological Simulation and Analysis in Open Pit	Hui Hu*, Tomas M. Fernandez-Steeger, Mei Dong, Rafiq Azzam
14:00-14:15	Artificial Cover Extraction Based on a Hierarchical Stripping Model in the Loess Plateau, China	Miao Lu*, Yang Mei, Hao Song
14:15-14:30	Quadtree Based Point Selection of Lightning Data	Stefan Peters*
14:30-14:45	Tea break	
14:45-15:00	Spatial Evaluation and Regionalization of Comprehensive Urbanization Level in China	Yang Wang*, Chuanglin Fang, Zhenbo Wang
15:00-15:15	Geographic Unit Sequences Based Remote Sensing Image Analysis: With a Study Case at Sichuan, China	Chunxiao Zhang*, Hui Lin, Xuejun Lu
15:15-15:30	Evaluation of the Potential of ASAR Data to Estimate Impervious Surface Area	Hongsheng Zhang*, Yuanzhi Zhang, Hui Lin
15:30-15:45	Developing Green Space Ecological Networks in Shijiazhuang City, China	Yanmei Zhuang*, Haiwei Yin, Fanhua Kong, Fengqiu Fan

**Welcome Dinner (18:30-20:30)**Venue: **Jinsha Hotel**

## June 25 (Morning, 08:30-12:30)

### OS01[Room A]: Health GIS (1)

**Co-Chairs: Xun Shi & Jun Tu**

08:30-08:45	Enabling Geographic Research for Health Professionals at Harvard University	Jeff Blossom*, Weihe Guan, Julia Finkelstein, Bonnie Burns
08:45-09:00	Geographical Analysis between Access to Primary Health Services and Concentration of Social Disadvantage in Southeast Queensland	Yan Liu*
09:00-09:15	Tracking Technology and GIS for Micro-scale Studies of Disease Transmission: a Feasibility Study	Feng Qi*, Fei Du, Seth Docherty
09:15-09:30	Mapping Birth Defects and Birth Weight in New Hampshire, US	Xun Shi*
09:30-09:45	Spatial Variations in the Relationships between Birth Weight and Socioeconomic, Environmental, and Behavioural Factors in the State of Georgia, USA, Explored by Geographically Weighted Regression	Jun Tu*
09:45-10:00	Implementation and Designing of Temporal and Spatial Early Warning Model for HIV/AIDS Spread on Sex by Agent Based Modeling	Quanli Xu*, Kun Yang, Shuangyun Peng, Junhua Yi

### OS02[Room A]: Health GIS (2)

**Co-Chairs: Xun Shi & Ping Yin**

10:30-10:45	Generating Synthetic Benchmark Data for Evaluating Disease Mapping Approaches	Hu Wang, Diansheng Guo*
10:45-11:00	Variable Catchment Size for Two-step Floating Catchment Area (2SFCA) Method	Wei Luo*, Tara Whipple
11:00-11:15	Modeling the Transmission of the Avian Influenza Virus in a Complex Dynamical Network	Mu Yang, Zhiben Jiang, Bing Xu*
11:15-11:30	Detecting Disease Clusters in Arbitrary Shapes with a Redesignated Spatial Scan Statistic	Ping Yin*
11:30-11:45	Estimating Area Deprivation Effects on Mortality Using Evolutionary Algorithm	Xin Zhang*, M. S. Li
11:45-12:00	The Role of Different Transportation in the Spreading of New Pandemic Influenza in Mainland China	Yun Zhang*, Yong Zhang, Zhigang Liu

**OS03[Room B]: Remote Sensing and Climate Change (1)****Co-Chairs: Shuanggen Jin & Hui Lu**

08:30-08:45	Spatial-temporal Variability of Aerosol Optical Depth over the Yangtze Delta during 2001-2008	Jian Chen*, Hong Jiang, Zhongyong Xiao, Biao Wang, Guomao Zhou, Zishan Jiang
08:45-09:00	Earth's Surface Fluid Variations and Deformations from GPS and GRACE in Global Warming	Shuanggen Jin*, Liangjing Zhang, Guiping Feng
09:00-09:15	Monitoring Soil Moisture Change in Africa over Past 20 Years with Using Microwave Remote Sensing	Hui Lu*, Toshio Koike, Peng Gong
09:15-09:30	Assessment of Waterlogging Hazard in Tianhe District of Guangzhou City Using Remote Sensing and GIS	Tielan Huang, Yunpeng Wang*
09:30-09:45	Advance in Climate Change and Global Environment Research Based on Geoinformation Technology in China	Wei Wei*, Keyan Xiao
09:45-10:00	Remote Sensing, Crop Yield Estimation and Agricultural Vulnerability Assessment: a Case of Southern Alberta	Wei Xu*, Xiaomeng Ren, Anne Smith

**OS04[Room B]: Remote Sensing and Climate Change (2)****Co-Chairs: Shuanggen Jin & Huixi Xu**

10:30-10:45	Analysis of the Pattern of Winter Wheat Drought and Its Response to Climate Change in Huang-Huai-Hai Region of China in Past Decade	Yan Huang*, Qingjiu Tian, Jun Liu, Lingtong Du
10:45-11:00	Monitoring the Land Surface Temperature Using MODIS Data in Zhejiang of China	Zishan Jiang*, Xiaohua Wei, Hong Jiang
11:00-11:15	Automatic Registration Between Remote Sensing Image and Vector Data Based on Line Features	Zhiqing Liu*, Baoming Zhang, Pencheng Li, Haitao Guo, Jinning Han
11:15-11:30	Passive Microwave Remote Sensing for Soil Moisture Retrieval on Tibetan Plateau, China	Mengli Qin*, Ruofei Zhong, Shu Wang
11:30-11:45	Spatial and Temporal Analysis of Urban Heat Island Effects in Chengdu City by Remote Sensing	Huixi Xu*, Yunhao Chen, Shangming Dan, Wenxia Qiu
11:45-12:00	Regionalization the Surface Heat Fluxes over the Tibetan Plateau by Using Satellite Data and the Tibetan Observation and Research Platform (TORP)	Yaoming Ma*, Lei Zhong, Binbin Wang

**OS05[Room C]: GIS, spatial reasoning, and spatial organization  
of urban and regional development (1)**

**Co-Chairs: Wei Xu & Xiaoyan Zhou**

08:30-08:45	Place-Bound or Footloose? Application of GIS Approach to the Locational Trajectory of Software Firms in Metropolitan Shanghai	Xiujing Bi*, Yuemin Ning, Wei Xu
08:45-09:00	Inter-city Innovation Linkage and Its Spatial Structure in Megalopolis: A Case Study of the Yangtze River Delta, China	Xiaohui Hu*, Debin Du
09:00-09:15	Preliminary Study of Urban Heat Island: Measurement of Ambient Temperature and Relative Humidity in Relation to Landcover in Kuala Lumpur	Illyani Ibrahim*, Azizan Abu Samah
09:15-09:30	The Spatial Structure of Producer Services in an Emerging Global City: A Case Study on Shanghai Downtown	Xiande Li*, Wubin Ma
09:30-09:45	Spatial Characteristics of the Residents Commuting Behavior in Beijing	Bin Meng*, Liming Zheng, Huili Yu, Guifen Me
09:45-10:00	A Comparison of Higher Education Location Patterns in Guangdong China and California USA	Yu Zhao*, Debin Du
10:00-10:15	Land Use/Cover Change Analysis in Wuhan City Based on RS and GIS	Xiaoyan Zhou*, Chun Kang

**OS06[Room C]: GIS, spatial reasoning, and spatial organization  
of urban and regional development (2)**

**Co-Chairs: Wei Xu & Yongling Yao**

10:30-10:45	GIS Analysis on Commercial Housing Construction and Urban Land Supply of Nanjing	Gang Chen*, Congcong Wu, Zhi Li, Yingxia Pu, Jingsong Ma, Jiechen Wang
10:45-11:00	Industrial Site Selection by GIS, in Isfahan, Iran	Marzieh Reisi*, Lu Aye, Alireza Soffianian
11:00-11:15	Spatial Pattern and Structural Determinants of Shanghai's Housing Price: A GWR-based Approach	Qingyuan Tang*, Wei Xu, Fuli Ai
11:15-11:30	The Spatial Distribution Pattern Analysis of Public Cultural Facilities in Shanghai	Dongdi Tian*, Jianxun Rui, Neng Chen, Yinghong Gu, Bin Yan
11:30-11:45	Spatial Evolution and Restructuring of the Electrical Equipment Industrial District in Wenzhou, China	Zhouyang Wang*, Yehua Dennis Wei
11:45-12:00	Urban Evacuation Research Based on GIS	Bowei Wen*, Haiping Wei, Jie Xiang, Hu Chen, Chaofeng Wang
12:00-12:15	Spatial Correlation of Nocturnal Light with Social-Economic Factors at Different Scales of Urban Areas—Case Study of Beijing	Yongling Yao*, Yao Li

## **OS07[Room D]: GeoInformatics in Disaster Risk Research (1)**

### **Co-Chairs: Desheng Liu & Jintao Zhao**

08:30-08:45	Assessment of Post-earthquake Secondary Geological Hazard Risk Based on GIS	Jun Du*, Chao Wang, Shanling Peng, Panpan Chen
08:45-09:00	An Improved Model of Regional Flood Disaster Risk Assessment Based on Remote Sensing Data	Guangyao Duan*, Wenji Zhao, Zhuowei Hu, Dan Fang
09:00-09:15	Map World Based Fast Disaster Image Map Service	Yang Mei*, Miao Lu
09:15-09:30	Application of Extension Theory Model in the Risk Assessment of Soil Erosion: A Case Study of Makeng Area in Fujian Province, China	Tingting Shi*, Zhihua Chen, Ningtao Wang
09:30-09:45	The Research on Stability of Jinshan Deep Groove at Frontier Area of Shanghai Petrochemical CO. LTD	Qingwei Zhang*, Chun Shi, Jun Wang, Zhiying Yv
09:45-10:00	A Regionalization and Assessment of Natural Disaster Risk of Corn in China Based on GIS	Jintao Zhao*, Jingai Wang, Yongdeng Lei, Xiaoyun Huang

## **OS08[Room D]: Remote Sensing in Geological Applications**

### **Co-Chairs: Desheng Liu & Haiyang Yu**

10:30-10:45	Urban Ground Subsidence Detection in Zhuhai City Based on Small Baseline Subset Analysis Technique	Ai Bin*, Kai Liu, Xia Li
10:45-11:00	Mining Subsidence Monitor Using ALOS Satellite Data	Yun Gong*
11:00-11:15	The Selection of Terrain Point Based on Multi-orientated Observation for Relief Generalization	Lina Huang*, Lifan Fei
11:15-11:30	Monitoring the Subsidence of KaiLuan Coal Mine by Using D-InSAR Technology	Rui Liu*, Xiaojun Rao, Hongjiang Mao
11:30-11:45	Railway Subsidence Monitoring by High Resolution INSAR Time Series Analysis in Tianjin	Qingli Luo*, Daniele Perissin, Hui Lin, Qinghua Li, Ralf Duering
11:45-12:00	Estimating 3D Canopy's Gap Fraction Using Photographic Method	Jiangeng Wang*, Xuezhi Feng, Pengfeng Xiao
12:00-12:15	Detection and Volume Estimation of Mining Subsidence Based on Multi-temporal LiDAR Data	Haiyang Yu*, Xiaoping Lu, Gang Cheng, Xiaosan Ge

**OS09[Room E]: Spatial Analysis(1)****Co-Chairs: Bo Huang & Ao Zhang**

08:30-08:45	GIS-Based Spatial Analysis of Population Density Patterns in China 1953-2000	Ying Cai*, Fahui Wang, Shuai Wang
08:45-09:00	A Tool to Analyse Spatial Distribution of Science Research Activities Based on Toponym Resolution in Text	Jianxia Ma*, Hanqing Ma, Shaoxiong Liu, Yingguang Zhao, Na Li
09:00-09:15	Global Contagion of the U.S. Financial Crisis: An Exploratory Spatial Data Analysis	Zhanyun Wu*, Minhe Ji, Hailong Su
09:15-09:30	GIS Spatial Analysis of Floating Population in Wenzhou, China: Implications for Industrial Restructuring	Jianguang Xu*
09:30-09:45	Karst Rocky Desertification and Peasant Household Anti-poverty Livelihood Behaviors Current Situation and Expectation	Jingyuan Xu*, Yecui Hu, Xinqi Zheng
09:45-10:00	GIS-based Coal Mining Land Reclamation Suitability Evaluation Assessment	Ao Zhang*, Hesheng Zhang
10:00-10:15	Geo-visualizing China's Changing Urban Hierarchy: 1985 to 2005	Richard Greene*, Xumei Chen

**OS10[Room E]: Spatial Analysis(2)****Co-Chairs: Bo Huang & Xiaowei Zhao**

10:30-10:45	Spatiotemporal Structure of Taxi Services in Shanghai:Using Exploratory Spatial Data Analysis	Zhongwei Deng*, Minhe Ji
10:45-11:00	Spatiotemporal Variation of Soil PH in the Past 30 Years of Guangdong Province, China	Zhixing Guo*, Zepeng Chen, Min Chai, Zhenshou Zhan
11:00-11:15	Multi-scale Spatial Structure Analysis on the Urban System A Case Study in Shandong, China	Qin Nie*, Caihong Meng
11:15-11:30	The Application of AHP in Oil and Gas Pipeline Route Selection	Jianhua Wan, Guanghui Qi*, Zhe Zeng, Shujuan Sun
11:30-11:45	Tourism Spatial Association Analysis Based on GIS Technology For the Cities in Anhui of China	Zhongyuan Yang*, Song Lu, Xiulong Jin
11:45-12:00	The Optimization of Regional Air Quality Monitoring Network Based on Spatial Analysis	Xiaodong Zhuang*, Rei Liu
12:00-12:15	Spatial Analysis of Regional Economic Development Based on GIS in Chongqing, China	Jinglong Liu*, Gang Xu
12:15-12:30	The Neighborhood Effects of Environmental Regulation and Total Factor Productivity Growth: Based on Two Stages of DEA Spatial Durbin Models	Xiaowei Zhao*, Fan Zhang

**OS11[Room F]: GIS Algorithms****Co-Chairs: Bin Jiang & Jiaogen Zhou**

08:30-08:45	An Algorithm and Implementation of Road Line Type Identification	Weiyong Wu, Chuanli Kang*
08:45-09:00	An Effective Algorithm for Spatial Query Using Spatial Adaptive Grid Index Filter	Hao Lu*, Ershun Zhong, Xieliu Shu, Tianbao Wang, Shaohua Wang
09:00-09:15	A New Algorithms of Building Boundary Extraction Based on LIDAR Data	Wei Shen*, Jun Han, Feng Yuan
09:15-09:30	Multiscale-based Classification and Coding of Fundamental Geographic Information	Wenwen Tian*, Xinyan Zhu, Lian Duan
09:30-09:45	Syntactic Pattern Recognition Oriented Large Scale Settlement Matching Algorithm	Junkui Xu*, Haizhong Qian, Fang Wu, Yu Liu
09:45-10:00	A Novel Adaptive Algorithm for Spatial Interpolation	Jiaogen Zhou*, Chen Xu, Dongmei You, Daoyou Huang

**OS12[Room F]: Software Techniques****Co-Chairs: Bin Jiang & Huimin Wang**

10:30-10:45	Developing Space Syntax Tools for Free and Open Source Software for GIS	Burak Beyhan*
10:45-11:00	An Optimized Method Based on DSP in Embedded Software GPS Receiver	Shaolong Cui*, Xiangzhen Yao, Xinxian Qin, Jinyun Fang
11:00-11:15	Data Conversion between CAD and GIS in Land Planning	Linyan He*, Guoping Wu, Dongmei Dai, Li Chen, Gongxun Chen
11:15-11:30	A Solution of Technical Issues on Interaction for ARGIS	Wei Huang*, Min Sun
11:30-11:45	The Method and Application of Importing GIS Data to AnyLogic	Chunlei Li*, Xinqi Zheng, Xin Cao
11:45-12:00	Application of ArcGIS in Fractal Analysis of Rivers	Wenhui Yue*, Bailang Yu, Jianping Wu
12:00-12:15	Data Interoperability Analysis of MIF in ArcGIS Environment	Ruifu Wang, Shaojie Zhao*, Quanbo Xin, Aichao Liu
12:15-12:30	The Improved Douglas-Peucker Algorithm based on the Contour Character	Zhong Xie, Huimin Wang*, Liang Wu



## **OS13[Room G]: Information Extraction from RS Data (1)**

### **Co-Chairs: Le Wang & Bing Yang**

08:30-08:45	The Providing Poplar Plantation Map by Satellite Images IRS in Northern of Iran	Alireza Eslami*, Shahriar Sobheh, Zahedi
08:45-09:00	A Consistency Analysis of MODIS MCD12Q1 and MERIS Globcover Land Cover Datasets over China	Yaqian He*, Yanchen Bo
09:00-09:15	The Abnormal Information Extraction of the Hydrocarbon Micro-seepage Based on the Hyperspectral Image	Fang Hou*, Daming Wang, Ying Cai, Zhizhong li
09:15-09:30	Satellite Image Classification Based on Gabor Texture Features and SVM	Jin-Tsong Hwang*, Kuan-Tsung Chang, Hun-Chin Chiang
09:30-09:45	Proposing a Methodology in Preparation of Olive Orchards Map by RS and GIS	Ali Mohammadi Torkashvand*, V. Shadparvar
09:45-10:00	Spatio-temporal Analysis of Urban Built-up Area Extension in Yantai City Based on Multi-source Remote Sensed Images	Mengquan Wu*, Jingpu Wang, Xia Wang, Xibing Sun
10:00-10:15	Spectral Knowledge Database for Sugarcane Identification with Multi-Temporal Remote Sensing Images	Bing Yang*, Zhigang Liu, Meihua Ding, Weihua Mo, Yun Zhang, Ran Wang

## **OS14[Room G]: Spatial Database and Data Management (2)**

### **Co-Chairs: Le Wang & Fangyong Yuan**

10:30-10:45	Application of Spatio-Temporal Data Model in Database of Beijing Urban History	Hong Dai*, Ning Yu, Ziguang Chang
10:45-11:00	Architecture of Space-time Record System Based on Location-leading	Li Guan*, Xuefeng Lv, Bogang Yang
11:00-11:15	Effective Reverse k-Nearest Neighbor Query Based on Revised R*-tree in Spatial Databases	Boren Li*, Mao Pan, Zixing Wu
11:15-11:30	Design and Implementation of a GIS-Based Poverty Information Management System	Jie Tian, Yonghua Sun, Cankun Yang, Wei Tu*
11:30-11:45	Design and Implementation City and County Earthquake Emergency Platform	Jinghai Xu*, Gaozhong Nie, Xu Xu, Zhu Dan, Ye Han
11:45-12:00	Design and Implementation of GIS Smart Client Based on Service-oriented	Liang Huo, Fangyong Yuan*
12:00-12:15	Spatiotemporal Modeling of Rural Socio-economic Statistic Information Based on GIS	Yanbing Wang*, Xiaojuan Li, Huili Gong, Cankun Yang

**OS15[Room H]: Ecological Applications (1)****Co-Chairs: Weining Xiang & Guangming Zhao**

08:30-08:45	Correlative Analyses of LAI, NDVI, SPAD and Biomass of Winter Wheat in the Suburb of Xi'an	Li Chen*, Guoping Wu, Gongxun Chen, Linyan He, Wei Shi, Qingshen Ma, Yu Sun, Fuping Zhang
08:45-09:00	Analysis on the Dynamic of Forest Landscape Pattern Based on RS and GIS in Meicheng Forest-farm	Qingfeng Huang*, Xiaodong Wang, Changhua Lu
09:00-09:15	Analyzing and Pplanning Rural Ecosystem and Environment in High-resolution Remote Sensing and GIS Environment	Yinghao Li*, Chudong Huang, Xinyue Ye
09:15-09:30	Dynamics of the Carbon Storage of Terrestrial Ecosystems in Geological Spatial and Temporal Scales	Yuandan Ma*, Hong Jiang, Bin Wang
09:30-09:45	ALMANAC Model Parameters Sensitivity Analysis by Sobol Algorithm	Yan Sun*, Shuqing Zhang, Huapeng Li
09:45-10:00	Change Analysis On Eco-environment Of The Estuary Wetland Reserve Area Of Yellow River Delta Based On RS And GIS	Guangming Zhao*, Siyuan Ye, Maosheng Gao, Xigui Ding, Hongming Yuan, Jin Wang

**OS16[Room H]: Ecological Applications (2)****Co-Chairs: Weining Xiang & Jie Zhang**

10:30-10:45	Integrated GIS-based and Analytic Hierarchy Process Research on Urban Ecological Sensitivity of Shanghai City,China	Jianjun Cao*
10:45-11:00	Fusion of Airborne Hyperspectral and LiDAR Data for Tree Species Classification in the Temperate Forest of Northeast China	Lijuan Liu*, Yong Pang, Wenyi Fan, Zengyuan Li, Mingze Li
11:00-11:15	Frame Design for the Protection of Water Environment and Ecology, East Line of South-to-North Water Transfer Project, China	Tao Sun*, Rong Li, Guo Li
11:15-11:30	Environment Satellite HJ-1 CCD Data Dynamically Monitoring Cyanobacteria Bloom in Lake Dianchi	Jie Zhang*, Jian Chen
11:30-11:45	Modeling Fire Growth Simulation in Grassland Ecosystem	Edwin Chow*
11:45-12:00	Spatial Correlation Analysis between Impervious Surface, Green Space and Urban Heat Island	Xiaoping Zhang*, Mingxi Zhang, Jun Zhang, Yingbao Yang

**PS01[Lobby]: Poster Session (1) (08:30-10:30)**

Land Cover and Macro Ecological Changes in Source Region of the Yellow River in Last 30 Years	Tao Zhang*, Youjing Zhang, Qin Zhang, Qing Liu, Liwen Chen
The Analysis of Allocation Efficiency of R&D Resource--An Empirical Study of Panel Data from 31 Countries	Yongkai Zhang*, SanYing Zhao
Integration on Land-surface Evapotranspiration Monitoring System	Zhiqi Qian*, Youjing Zhang, Yingying Fang, Wei Shao, Guohua Wu
Measuring Neighbourhood Sustainability Performance: an Indexing Model for Gold Coast City, Australia	Fatih Dur*, Tan Yigitcanlar, Jonathan Bunker
Total Least Squares with Application in Geospatial Data Processing	Yanmin Jin*, Xiaohua Tong, Lingyun Li
The Design and Development of Risk Mapping Tool (RMT) Software	Ying Wang*, Juan Li, Jingai Wang, Mingmei Zhao, Hao Chen
Semi-automatic Optimal Route Location using High Resolution Satellite Images, GIS, Linear Programming and Active Contours Optimization Techniques	Adil I. Hassabo*, M. Hagai, C. K. Msemakweli
Remote Sensing of Impervious Surface Dynamics of Xiamen City, Southeastern China	Hanqiu Xu*, Dongfeng Lin
Sensitivity Analysis on Surface Soil Moisture to the Time Parameter of Land Surface Variables: Application with Remote Sensing Data	Pei Leng*, Xiaoning Song, Jianwei Ma, Xinhui Li
Agriculture Risk Assessment of Typhoon Disaster Based on GIS and Entropy Weight Theory_a Case Study of Fujian,China	Jinyu Ye*, Mingfeng Zhang, Guangfa Lin, Shan Yu
Carbon Cycle Review of the Permafrost in Qinghai-Tibet Plateau	Zhenhong Xie*, Qigang Jiang, Hao Wu
Fusion of ALOS and QuickBird Imagery for Mangrove Analysis: A Case Study in Beilun Estuary, Vietnam	Jia Hu*, Minhe Ji
Grassland Degradation in the Western of Songnen Plain	Shufeng Zheng*, Kai Meng, Yuan Sun, Huanjun Liu
Point Burning Dynamical Trajectory Algorithm in Simple Polygon	Yunhui Zhang*, Mangtun Gao, Jianjun Wu, Yan Zhang
Spatial Analysis of Influenza A H1N1 and the Evaluation of Risk Factors in Changsha City of China Based on GIS	Sha Jiang*, Jing Zhang, Jia Jin, Dapeng Zhang, Tun Wang
Spatio-temporal Processes and Causes Analysis of Jiayuguan Oasis in China over a 23a Period	Xingzhou Lin*, Yaowen Xie, Yuchu Xie, Chao Zhang
GIS-Based Analysis on the Region Eco-security Pattern: a Case of Changting County in Fujian Province, China	Huihua Lin*, Guosheng Wu, Hejian Zhu

**PS02[Lobby]: Poster Session (2) (10:30-12:30)**

Describing a Location for Different Users: a Location-based Model for Spatial Databases	Mati Tee*, Tõnis Kärdi
Accuracy Analysis of MAMS Data Using Direct Georeferencing	Kuifeng Luan*, Xiaohua Tong, Yanhua Ma, Rong Shu
Wind Retrieval over the Ocean Using Advanced Synthetic Aperture Radar	Lihua Wang*, Yunxuan Zhou, Yue Liu, Min Zhang
Web Content Acquisition in Web Content Aggregation Service Based on Digital Earth Geospatial Framework	Yunfei Xu*, Jingnong Weng, Ananta Raj Sharma, Dilshod Yussupov
Video Spatial Information Service Using Sensor Web	Xiaoming Shao*, Jianhua Mao, Xuefeng Liu, Ling Ye
The Spatial Concentration Patterns of Interprovincial Migration Flows in China, 1995-2000	Wenli Yu*, Yingxia Pu, Gang Chen, Jiechen Wang
The K-function Analysis of Space-time Point Pattern on Road Network	Xianrui Xu*, Zhong-ren Peng
The Effects of Land's Proximity to River on Spatial Pattern of Land Prices in Tokyo Metropolitan Area Using GIS: an Analytical Assessment	Sajad Alipour Eshliki*, Bahram Abedini Angherabi
The Discussion on the Construction of GIS-based Land Reclamation Management Information System	Chunbo Wang*, Zhongyi Wei, Shaohua Fu, Biao Tong
The Device and Implementation of the Editing Module in GIS	Yixin Hua, Hao Ding*, Yajun Zhang
The Development and Application for Dynamic Parameter Database of Rock Mechanics Based GIS	Shengguang Zhuo*, Lifang Zhang, Yuntao Wang, Junxia Ma, Guifang Yang
Evaluation of GNSS Receiver Autonomous Integrity Monitoring for Multiple Outliers with A Smart Random Sample Consensus Strategy	Xian-qin Tu*, De-feng Gu, Dong-yun Yi, Hai-yin Zhou
The Locatable Video: Acquisition, Segmentation, Retrieval	Yong Wu*, Xuejun Liu, Guangfa Lin
Ecological Function Regionalization and Ecological Planning in Shangri-la County Based on GIS	Hui Li*, Shuhua Yang, Zhiying Li, Xingyu Wang
A Self-adaptive Homomorphic Filter Method for Removing Thin Cloud	Wenting Cai*, Yongxue Liu, Manchun Li, Liang Cheng, Chenxi Zhang
Comparison of Interpolation Methods for Typical Meteorological Factors Based on GIS --a Case Study in JiTai Basin,China	Gege Yang*, Jing Zhang, Yanzhao Yang, Zhen You
County Economic Spatial Autocorrelation Research of Wanjiang Urban Belt in Anhui, China	Yongjiu Xia*, Xigang Zhu
Construction of Immovable Historical Relics Survey and Management Information System of Chuzhou Based on WebGIS	Jiajia Zheng*, Fei Li
Estimation of the USLE Cover and Management Factor C Using Satellite Remote Sensing: a Review	Weiwei Zhang*, Zengxiang Zhang, Fang Liu, Zhuping Qiao, Shunguang Hu

## June 25 (Afternoon, 13:30-17:30)

### OS17[Room A]: Spatial cloud computing

**Co-Chairs: Pinde Fu & Yunhui Zhang**

13:30-13:45	Geographic Information Public Services Platform Based on Cloud Computing Model	Chenwei Jia*, Qiang Liu, Ling Tong
13:45-14:00	The Computational Model of Multi-scale Population Density	Jinsong Liu*, Wei Wang, Haibing Xiang
14:00-14:15	Thinking and Computing Spatiotemporally to Enable Cloud Computing and Science Discoveries	Chaowei Yang*
14:15-14:30	Optimization for Viewshed Analysis on GPU	Hao Yu*, Yuehu Liu, Yong Gao, Mingchao Liu, Yong Zhao, Yu Li
14:30-14:45	A Grid-aided and STR-Tree-based Algorithm for Partitioning Vector Data	Yanran Zhang*, Lei Fang, Zhenhong Du, Renyi Liu, Junfeng Kang
14:45-15:00	Application of SharpMap Open Source Mapping Library in Fisheries	Shengmao Zhang*, Weisheng Zhou

### OS18[Room A]: GIS in Education

**Co-Chairs: Pinde Fu & Xinming Zhang**

15:30-15:45	Web GIS Education	Pinde Fu*
15:45-16:00	Teaching Undergraduate GIS Using Service-Learning and Cooperative-Learning Approaches	Yongmei Lu*
16:00-16:15	The Application of Positive Psychological Suggestion in GIS Major ---Taking Cartography as an Example	Xuemei Ma*
16:15-16:30	Human-computer Interaction: a Prototype for Data and Spatial Relations Representation and Interpretation in WebGIS	Marcelo Franco Porto*, João Francisco de Abreu, Renata Maria A. Baracho Porto
16:30-16:45	Advanced GeoInformation Science Education: Integrating Cutting-Edge Technological Development to Train Next Generation Workforce	Chaowei Yang*
16:45-17:00	The Model of Applicational Personnel Training and Construction of Curriculum System in GIS Specialty	Mingxin Zhang*, Keli Jia, Jianhua Li
17:00-17:15	The Design and Implementation of the Information Management System of the Elementary Educational Resources Based on GIS	Jie Zhang*, Yueyao Sun, Yaping Zhang
17:15-17:30	Space Differentiation of Chinese Secondary Vocational Education Based on GIS	Xinming Zhang*

## **OS19[Room B]: Smart Phone LBS and 3D Navigations (1)**

### **Co-Chairs: Ling Pei & Tun Wang**

13:30-13:45	Height aided GPS navigation using LiDAR DEM	Jing Li*, Xiangtao Fan
13:45-14:00	3D Personal Navigation Visualization Engine: Approaches and Future Trends	Zhengjun Liu*, Jixian Zhang, Qin Yan, Ruizhi Chen, Guangye Ye, Lin Pei, Lingli Zhu, Jingbin Liu
14:00-14:15	Sensor Assisted 3D Personal Navigation on a Smart Phone in GPS Degraded Environments	Ling Pei*, Ruizhi Chen, Jingbin Liu, Zhengjun Liu, Heidi Kuusniemi, Yuwei Chen, Lingli Zhu
14:15-14:30	Automated Abstraction of Building Models for 3D Navigation on Mobile Devices	Xuan Sun*, Bisheng Yang, Marco Attene, Qingquan Li, Shaobo Jiang
14:30-14:45	A New Spatial Index Methodology of Mobile GIS Based on Smart Phone	Gen Tian*, Jian Li, Fang Wang
14:45-15:00	Design and Realization of the Traffic Police MobileOffice System Based on Android	Tun Wang*, Jing Zhang, Luqi Li, Jia Jin

## **OS20[Room B]: Smart Phone LBS and 3D Navigations (2)**

### **Co-Chairs: Melissa Shahrom & Yujie Hu**

15:30-15:45	The Design and Implementation of the Geological Data Acquisition System Based on Mobile GIS	Huajun Chen*, Keyan Xiao
15:45-16:00	GPS Rapid Positioning Based on the ADPAM Algorithm	Jimin Liu*, Xiushan Lu, Liu Tong, Zhenjie Wang
16:00-16:15	Efficient Navigation for Privacy-Aware Personal Navigation Services: Preliminary Analysis	Melissa Shahrom*, Matt Duckham
16:15-16:30	Mobile GIS System for Pipeline Inspection at Coal Bed Methane Field	Min Wang*, Yongguo Yang, Xianfeng Song, Hepan Yang, Jing Wang
16:30-16:45	Time Efficiency Optimization Technique of Mass Data Rendering by Mobile GIS	Jisheng Xia*, Peiyan Chen, Kecheng Yang, Jun Tang

## **OS21[Room C]: Spatial Planning: Methods, Techniques and Experiences (1)**

**Co-Chairs: Belinda Wu & Qiyan Wu**

13:30-13:45	Spatial Data Analysis of Regional Inequality in Fujian Province in China since 1990	Peiyang Chen*
13:45-14:00	Spatial and Temporal Changes and the Driving Forces of Coastline in China Bohai Gulf in Recent 30 Years	Yi Gao*, Fenzhen Su, Bo Ping, Peng Liu
14:00-14:15	3D Cadastre and Urban Stereoscopic Development: Case Study of Nanjing, China	Qian Li*, Yongmei Liu, Dongliang Li
14:15-14:30	A Dynamic Spatial Model for Demographic Planning	Belinda Wu*, Mark Birkin, Phil Rees
14:30-14:45	The Minimum Cost of Hierarchical Location-allocation Models for Banks in Kunming, China	Qiyan Wu*, Shuang Wang, Jingwei Sun
14:45-15:00	A Value Approach for the Assessment of Urban Spatial Land-Use Structure: Case Wuhan, China	Bin Zheng*, Lina Huang
15:00-15:15	Fuzzy Analytical Hierarchy Process (FAHP): A GIS-based Multicriteria Evaluation/Selection Analysis	Mehdi Ziaei*, Fateme Hajizade

## **OS22[Room C]: Spatial Planning: Methods, Techniques and Experiences (2)**

**Co-Chairs: Belinda Wu & Qiyan Wu**

15:30-15:45	Personalized Route Planning Based On The Semantic Network:A Case Study of Kanazawa City, Japan	Zhenjiang Shen, Feiyu Hu*, Mitsuhiko Kawakami
15:45-16:00	Major Function Oriented Zone Planning and Land Use Management with 3S Technologies	Yongmei Liu*, Qian Li, Jingwei Sun
16:00-16:15	Agent-Based Modelling for Planning Support of Local Residential Policy in Kanazawa City, Japan	Yan Ma*, Zhenjiang Shen, Mitsuhiko Kawakami
16:15-16:30	Wireless Base Stations Planning Based on GIS and Genetic Algorithms	Hepan Yang*, Jing Wang, Xianfeng Song, Yongguo Yang, Min Wang
16:30-16:45	The Application Studies of Geographic Information System in Urban Planning	Wen Yu*, Linguang Zhang, Tao Guo, Hongliang Huang, Huifang Zhang
16:45-17:00	Evaluation of Intensive Land Use and the Growth Patterns in Urban Fringe: Using AHP and GIS Methods	Zhenlong Zhang*, Rui Peng

## **OS23[Room D]: Statistics and Application Models of Spatial Data**

**Co-Chairs: Yongmei Lu & Yong Zhao**

13:30-13:45	Agricultural Mechanization in Shanghai, China	Jianyong Lin, Junlan Chen*
13:45-14:00	An Effective Method for Interpolation	Fei He*, Jinyun Fang, Wan Zou
14:00-14:15	The Spatial Pattern of Headquarters about Top 500 Enterprises of Chinese Service Industries	Haining Jiang*, Renxu Gu
14:15-14:30	A Parallel Implementation of Nearest Neighbor Analysis Based on GPGPU	Yong Zhao*, Bin Chen, Yu Fang, Zhou Huang, Yuehu Liu, Hao Yu
14:30-14:45	Spatialization Modeling of Rural Socio-economic Data Based on Neural Network:A Case Study in Fangshan District,Beijing,China	Yaqing Li*, Xiaojuan Li, Yonghua Sun, Jingyi Sun
14:45-15:00	Spatial and Temporal Distribution and Statistic Method Applied in Crime Events Analysis	Shuai Wang*, Xiaojuan Li, Ying Cai, Jie Tian
15:00-15:15	Spatial Point Analysis of Road Crashes in Shanghai: A GIS-based Network Kernel Density Method	Becky Loo, Shenjun Yao*, Jianping Wu

## **OS24[Room D]: Spatial Information Technology Transfer and**

### **Entrepreneurship**

**Chair: Lin Liu**

Introduction: A discussion between academia, industry, and VCs on GIS technology, its application, the transfer of technology from academia to industry, the funding and investment opportunities, and entrepreneurship.

15:30-15:40	Vincent Tao	Global Earth/PPLive
15:40-15:50	Yuguo Sun	Siwei
15:50-16:00	Yongqi Yang	Gaode
16:00-17:30	Panel discussion	
	Vincent Tao	Global Earth/PPLive
	Yuguo Sun	Siwei
	Yongqi Yang	Gaode
	Bin Li	Central Michigan University
	Lin Liu	University of Cincinnati
	Xun Shi	Dartmouth College



**OS25[Room E]: WebGIS****Co-Chairs: Chaowei Yang & Jiajia Zheng**

13:30-13:45	Development of Shanghai Urban Disaster Information System Based on Open Source WebGIS	Ke Chen*, Jianxun Rui, Jiahong Wen
13:45-14:00	A Method for Service Oriented WebGIS Construction by Integrating Open Source GIS	Jing Deng*, Xingqi Zheng, Lina LvKouqiang Zhang
14:00-14:15	Geospatial Mashup: Technologies, Challenges, and Opportunities	Pinde Fu*, Michael Goodchild, Chaowei Yang
14:15-14:30	Spatial Information and Functionality Services with SASD and SVG APIs	Yan Li*, David Dailey, Guobin Chi, Weiyong Lin
14:30-14:45	Online System for Satellite Observation Planning	Chaoliang Wang*, Xianfeng Song, Zhen Deng, Lei Feng, Chuanrong Li

**OS26[Room E]: WebGIS and Geospatial Cyber-infrastructure****Co-Chairs: Chaowei Yang & Ming Peng**

15:30-15:45	The Dynamic Expression of Three-dimensional Meteorological Thematic Fields Based on WebGIS	Wei Hu*, Hui Zhang, Jingsong Ma, Gang Chen, Jiechen Wang
15:45-16:00	An Integrated Framework for Retrieving and Analyzing Geographic Information in Web Pages	Hao Lin*, Longping Hu, Yingjie Hu, Jianping Wu, Bailang Yu
16:00-16:15	The GEOSS Clearinghouse High Performance Search Engine	Kai Liu*, Chaowei Yang, Wenwen Li, Zhenlong Li, Huayi Wu, Abdelmounaam Rezgui, Jizhe Xia
16:15-16:30	Spatial Information Distribution Model Based on The Global Subdivision Theory	Nan Lu*, Chengqi Cheng
16:30-16:45	The Preliminary Application of WebGIS in Assessing Environmental Impact on Human Health	Ming Peng*, Runkui Li, Xiaoyong Cui, Wenjun Ding, Xinfeng Zhao
16:45-17:00	MRGIR: Open Geographical Information Retrieval Using MapReduce	Zhiang Wu*, Bo Mao, Jie Cao

## **OS27[Room F]: Statistics and Geospatial Decision Support Systems**

**Co-Chairs: Yan Li & Yuxin Zhu**

13:30-13:45	A Flexible Soil Moisture Calculation Workflow under Geographic Web Service	Jiaying Chen*, Haitao Zhang, Jianli Gu, Long Guo, Nengcheng Chen
13:45-14:00	The Evaluation of the Quality of Life for Urban Residents in Beijing Based on the Factor Analysis	Jingyi Sun*, Xiaojuan Li, Yonghua Sun, Yaqing Li
14:00-14:15	The Population Spatial Distribution Model Based on the Spatial Statistics in Shandong Province, China	Jinzong Zhang*, Yuxin Zhu, Qin Nie
14:15-14:30	The Establishment and Application of Spatial Decisions Support Systems of Digital Forestry	Yinghui Zhao*, Li Gao, Fengri Li, Debin Li
14:30-14:45	A Land Consolidation Project Management Information System Base on Workflow	Jinhao Zhou*, Weixin Ling, Yueming Hu
14:45-15:00	The Spatial Heterogeneity and Correlation of Population Distribution in Xinjiang Uygur Autonomous Region	Yuxin Zhu*, Jinzong Zhang, Yuli Zhu

## **OS28[Room F]: Transportation Applications**

**Co-Chairs: Yu Liu & Tianchi Zhang**

15:30-15:45	The Formation of Choice Set for Multiple Flexible Activities Under Space-Time Constraints	Xiang Chen*, Mei-Po Kwan
15:45-16:00	Traffic Sign Detection Based on Visual Attention Model	Xiaoguang Hu*, Xinyan Zhu, Hui Li, Deren Li
16:00-16:15	Exploring Human Mobility Using Massive US Flight Trajectories Data	Bin Jiang*
16:15-16:30	How Does Race Matter? - Investigating the Spatio-Temporal Changes of Commuting Flows and Comparing the Differences Among Various Racial Groups	Xiaobai Yao*, Woo Jang
16:30-16:45	A Dynamic Network Integrated Engineering Method for Traffic Congestion Model	Jieyun Xia, Yuxiong Zeng, Yuhuai Zeng*
16:45-17:00	The Exploring Reliability Parameters of Urban Public Transport Network for the Emergency Management	Yang Zhang*, Jianghua Zheng
17:00-17:15	GIS Application for the Bus Rapid Transit Plan	Tianchi Zhang*

## **OS29[Room G]: Spatial Database and Data Management (3)**

**Co-Chairs: Diansheng Guo & Yongna Cao**

13:30-13:45	The Application of Geospatial Data Technique Based on GIS on Oil Field Exploration & Development Graphic and Documents Management Database	Yongna Cao*, Guifang Yang
13:45-14:00	Extracting Spatial Association Rules from the Maximum Frequent Itemsets Based on Boolean Matrix	Junming Chen*, Guangfa Lin, Zhihai Yang
14:00-14:15	Research on the Spatial Data Warehouse Establishment for Digital South China Sea	Peihong Jia*, Dakui Zhu, Xia Zhen, Wenqing Xu
14:15-14:30	Incremental Harvesting Model of Distributed Geospatial Data Registry Center Based on CSW	Ming Li*, Xinyan Zhu, Yifang Mei
14:30-14:45	Remote Sensing Image Database Based on NOSQL Database	Zhifeng Xiao, Yimin Liu*
14:45-15:00	Publication and Discovery of Earth Science Data and Services in Federated Registries	Peisheng Zhao*, Christopher Lynnes, Wenli Yang, Liping Di
15:00-15:15	Technical Methods for Direct Access to ArcSDE Vector Feature Model in RDBMS	Longting Zhou*, Zhihong Li, Qingqing Li, Weili Xu

## **OS30[Room G]: Cartographic Theory and Applications**

**Co-Chairs: Diansheng Guo & Xi Tang**

15:30-15:45	An Interactive Control of Display Speed for Cartographic Animation	Jianxiang Chen*, Xi Tang, Yuming Huang
15:45-16:00	A Method for Building Theme Map of GIS Based on Google Maps API	Su Li*
16:00-16:15	'Re-visualizing' Thematic Diagrams to Design a User-oriented Atlas: Interpretive Animations and Multiple Interactions	Xi Tang*, Yuming Huang
16:15-16:30	The Applications of Voronoi Diagram in Cartography	Bao Wang*, Wei Hu, Yingxia Pu, Jiechen Wang
16:30-16:45	Ontology Driven Automatic Web Thematic Mapping Based on Web Service Chain	Xingguo Zeng*, Fei Zhao
16:45-17:00	Syntax-based Construction Theory for Symbols in Web Thematic Maps	Fei Zhao*, Qingyun Du, Xingguo Zeng

**OS31[Room H]: Ecological Applications (3)****Co-Chairs: Bing Xu & Zhen Zhang**

13:30-13:45	Red Tide Identification Research in Lianyungang Sea Area Based on RS, GIS and GPS technology	Minglian Jiao*, Xia Lu, Hongquan Xie, Chang-e Dou
13:45-14:00	Landscape Pattern and Stability Analysis of Jiuzhaigou Nature Reserve in Sichuan China	Yanguo Liu*, Qing Wang, Jun Wang
14:00-14:15	Relationship between Landscape Pattern and Water Quality in North Jiangsu Plain River Network Region,China	Huihua Lv*, Juan Cai, Youpeng Xu
14:15-14:30	Progress and its Enlightenments in Application Research on Emergy Theory	Jingjing Wang*, Jinhe Zhang
14:30-14:45	Monitoring the Response of Vegetation to Acid Deposition in Eco-regions of Subtropical China Based on SPOT/NDVI	Jiaxin Jin, Hong Jiang, Xiuying Zhang*, Ying Wang
14:45-15:00	Remote Estimation of Chlorophyll a Concentrations in Large Lake Water during Cyanobacterial Algae Bloom Outbreak	Yun Zhang*, Xuezhi Feng, Xianfu Cheng, Chuanhui Wang
15:00-15:15	Modeling the Spatial-temporal Dynamics of Net Primary Production in Yangtze River Basin Using IBIS Model	Zhen Zhang*, Hong Jiang, Jinxun Liu, Qian Zhu, Xiaohua Wei, Zishan Jiang, Guomo Zhou, Xiuying Zhang, Juejing Han

**OS32[Room H]: Ecological Applications (4)****Co-Chairs: Bing Xu & Yu Zhang**

15:30-15:45	Spatial Scale Effect and Spatial Scaling of Chlorophylla Concentration in Lake Taihu,China	Ying Bao*, Qingjiu Tian
15:45-16:00	Urban Lake Evolution and Ecological Protection Research in Wuhan City Based on GIS	Juan Dai*, Miao He, Cheng Chen, Jiasheng Wang
16:00-16:15	Google Earth and GIS Applications to the Third National Survey of Cultural Relics in Xinjiang	Biao Deng*, Yueping Nie, Rong Li
16:15-16:30	Using Fuzzy Approach to Build a Continuous Relationship between SCS Curve Number and Soil Properties	Runkui Li*, Xianfeng Song, Zheng Duan, Ming Peng
16:30-16:45	Satellite Remotely-Sensed Analysis of Temporal-Spatial Variations of Chlorophyll-a Concentration in South China Sea	Ying Wang*, Hong Jiang, Xiuying Zhang, Jiaxin Jin, Yueqi Wang
16:45-17:00	The Analysis of the Spatial Pattern of Prehistoric Settlement Sites Based on GIS and Spatial Data Mining	Lijie Yan*, Yishao Shi, Ruixia Yang, Peng Lu, Li Zhu, Qiang Fu
17:00-17:15	Wavelet Analysis on NO2 Column Density and Chlorophyll Concentration in Yangtze River Estuary	Yu Zhang*, Hong Jiang, Cheng Chen, Xiuying Zhang, Ying Wang

**PS03[Lobby]: Poster Session (3) (13:30-15:30)**

The Changes of Land Use and Cover and NPP in Mining Area_A case study in China	Fu Chen, Na Wei*, Hongbing Yang, Qian Tang, Li Wang
Spatial Structure of Eminent Tourism Resources in Suzhou,China: A GIS-based Approach	Fajian Liu*, Jie Zhang, Honglei Zhang, Dongdong Chen
Spatial Filtering Analysis of Sex ratios at Birth in China based on Eigenvector	Songlin Zhang*
Distributed Land Use Data Integration Mechanism based on OGC Standards-Compliant Geospatial data Grid Services	Yumei Sun*, Aiqing Guo
Interactive Expression Design of Multimedia Maps Based on Flash	Yan Huang*, Xi Tang, Yuming Huang
A Novel Multiresolution Cell Complex Model	Ming Liao*, Liangchen Zhou, Guonian Lv, Yan Cao, Huabing Li
Analysis of Space-time Pattern in Evapotranspiration and Meteorological Driving Factors over the Source Region of the Yellow River	Shizan Deng*, Youjing Zhang, Shuqian Zheng, Ming Cao, Yingying Fang
Spatial Distribution Pattern Change of Chinese Migration in Recent 10 Years	Qi Shen, Xiaoli Huo*
Spatial Differential Features of Inbound Tourists in Jiangsu,China	Shaojing Lu*, Jie Zhang, Honglei Zhang
Spatial Characteristics of Air Pollution in the Main City Area of Chengdu,China	Shuting Li*, Shujun Song, Xin Fei
Spatial and Temporal Analysis of MODIS EVI and TRMM 3B43 Rainfall Retrievals in Australia	Wing Fung James Wong*
Semitransparent Construction Technology for Geospatial Information Service Chain	YanJun Wang*, Xin Li, Xiaomin Yang
Integrating Location Quotient, Local Moran's I and Geographic Linkage for Spatial Patterning of Industries in Shanghai, China	Jing Feng*, Minhe Ji
Comparison of Interpolation Methods for Spatial Precipitation under Diverse Orographic Effects	Xian Luo*, Youpeng Xu, Yi Shi
Spatial Distribution of Satellite Snow Cover in Typical Area of Tianshan Mountains Based on MODIS	Jintang Lin*, Xuezhi Feng, Pengfeng Xiao, Hui Li
Identification for Building Surface Material based on Hyperspectral Remote Sensing	Jun Zhu*, Lifan Zhou, Dengrong Zhang
The Coastal Erosion of the Abandoned Yellow River Delta in Northern Jiangsu Province, China: Based on Analysis of Remote Sensing Images	Xingjian Liu*

**PS04[Lobby]: Poster Session (4) (15:30-17:30)**

Risk Assessment of Rainstorm Waterlogging on Subway in Central Urban Area of Shanghai, China Based on Scenario Simulation	Ruisong Quan*, Lijia Zhang, Min Liu, Min Lu, Jingjing Wang, Haiyan Niu
Resident Islands Typhoon Disaster Defense Situation Research and Inspiration of Index System—With Dongtuo County, China as Example	Miao Yu*, Yonghua Tan, Wengong Yu, Jinchao Wu
Reservoir Case Base System of Ecological Environmental Impact	Pengjie Xu*, Lei Deng
Research on User-defined Query of Geographic Information Based on Rule Engine	Chenfan Liu*, Hanfei Zhang
Research on Ontology-based Web Spatial Decision Support System	Xi Mao*, Qi Li, Shuai Liu, Junkai Zhang
Realization of Vector Data Service Based on Windows Communication Foundation	Canyou Liu*, Bin Zhang, Li Guo, Wei Zhang
Quantitative Analysis of Architectural Landscape Vision Based on 3D Urban Model	Changlin Yin, Qingming Zhan, Wenqiang Xu*, Honghui Zhang
A Reliable Method for 3D Building Rooftop Reconstruction based on Dynamic Triangle Technique Using LiDAR Data	Liang Cheng*, Lihua Tong, Wei Zhao, Yongxue Liu, Manchun Li
The Tupu Analysis of Eco-environmental Landscape Change: a Case of Fujian, China	Guosheng Wu*, Huihua Lin, Ke Liao
Spatial and Temporal Occurrence and Susceptibility Assessment of Rainfall-induced Geological Disasters in Anji County, China	Jintao Xu*, Youpeng Xu
Regression Analysis of Optimal Path's Related Factors Based on Cognition	Jia Jin*, Jing Zhang, Dapeng Zhang, Sha Jiang
Development of a Distributed Hydrological Model Based on MapWinGIS	Dapeng Zheng*, Jinkang Du, Hanyi Rui, Qian Li
The Application of Informatization Technology in Coastal Construction of Lianyungang, China	Jian Chen*, Zhen Song, Jiajia Wang
Personalized Retrieval of Spatial Information Combining User Profile With Query Request	Yu Xia*, Jun Gong, Xinyan Zhu
Organization and Management of Spatial Information Oriented to Mobile Smart Terminal and Its Application	Xuefeng Liu*, Longlong Lu, Jianhua Mao, Zhenming He, Jing Zhu
Non-permanent Migration Analysis for Rural Labor:--A Theoretical Model and Empirical Analysis of Cixi City in Zhejiang Province, China	Baijun Wu*, Sai Lin, Qi Shen
One Efficient Compression Method Used On WebGIS	Yanwei Zhao*, Zhenlin Cheng, Hui Dong, Jinyun Fang
Estimating Seismic Losses of Schools Using SELENA: the Case of Wenchuan Earthquake	Yan Yang*, F. Benjamin Zhan, Lin Li

## June 26 (Morning, 08:30-12:30)

### OS33[Room A]: GeoInformatics in Disaster Risk Research (2)

Co-Chairs: Min Liu & Nengcheng Chen

08:30-08:45	Geospatial Sensor Web for Smart Disaster Emergency Processing	Chuli Hu*, NengCheng Chen
08:45-09:00	The Hazard-formative Environment Evolution of Storm Surge Hazard in Yang Shan Port, China	Jing Huang*, Jun Wang, Mingwu Ye, Zhenlou Chen, Shiyuan Xu
09:00-09:15	Evaluation of Wind-induced Lodging Risk for Maize Cultivar Based on GIS	Chunqiao Mi*, Xiaodong Zhang, Shaoming Li, Jianyu Yang, Dehai Zhu
09:15-09:30	Physical Vulnerability Assessment on Storm Surge Disaster of Coastal Regions of China during 1990 to 2009	Lirong Tan*, Jun Wang, Ke Chen
09:30-09:45	Division Method and Technology of Agricultural Climate of Suitable Region for Planting Southern Subtropical Fruit trees in Fujian Province of China	Hui Chen*, Zhiguo Ma, Jiayi Wang, Weihua Pan, Zonghuan Xu, Wenhua Cai
09:45-10:00	Study on Scenario Simulation and Risk Regionalization of Storm Surge Disaster in Coastal Cities: A Case in Shanghai,China	Mingwu Ye*, Jun Wang, Shiyuan Xu, Jing Huang, Zhenlou Chen, Yaolong Liu

### OS34[Room A]: GeoInformatics in Disaster Risk Research (3)

Co-Chairs: Min Liu & Zhonghai Yu

10:45-11:00	Collection and Remote Management of Disaster Information with Mobile Positioning Terminals	Tao Hu*, Xinyan Zhu, Kehua Su, Lian Duan
11:00-11:15	Line-Based Registration for UAV Remote Sensing Imagery of Wide-spanning River Basin	Wenqian Zang, Jiayuan Lin*, Baosen Zhang, Heping Tao, Zhongmei Wang
11:15-11:30	Multi-scale Coupling and Application of Natural Disaster Risk Analysis	Yaolong Liu*, Zhenlou Chen, Jun Wang, Mingwu Ye, Shiyuan Xu
11:30-11:45	Citrus Pest Forecasting and Decision-making System Base on Geo-ontology	Rujie Duan, Shanqin Wang*, Hongyu Zhang, Zhiqiao Yang
11:45-12:00	GIS-based Regional Prediction of Landslides in Wanzhou County, the Three Gorges Reservoir Area	Caiyan Wu*, Qing Wang, Jianping Qiao
12:00-12:15	Modeling and Implementation of Situation Symbols in Emergency Thematic Cartography	Zhonghai Yu*, Lin Li, Junwu Qiu, Zhigang Cheng, Shaoqin Chen

## **OS35[Room B]: Remote Sensing Data for Hydrological Applications (1)**

**Co-Chairs: Hongjie Xie & Jiahua Zhang**

08:30-08:45	Surface Modelling of Annual Precipitation in the DongJiang River Basin ,China	Gongxun Chen*, Guoping Wu, Li Chen, Linyan He, Chao Jiang
08:45-09:00	A River Channel Storage Volume Calculation Service Based on Web Processing Service	Xin Li, Nengcheng Chen*, Wei Wang, Chao Wang
09:00-09:15	Application of GIS Network Analysis in Water Pollution Control of Huaihe River Basin	Yan Jiang*
09:15-09:30	Mapping Evapotranspiration Using MODIS and GRACE Data	Qihong Tang*, Xuejun Zhang
09:30-09:45	The Response of Land Subsidence by Groundwater Overexploitation using PSInSAR:Huirou Emergency Water Source Case Study	Sa Wang*, Huili Gong, Zhaofeng Du, Yongqiang Ren, Zhaogin Gu
09:45-10:00	The Coupled Routing and Excess Storage(CREST) Distributed Hydrologic Model Sensitivity to Rainfall Spatiotemporal Resolution	Yixin Wen*, Yang Hong, Jonathan. J. Gourley, Zac Flamig, Xianwu Xue, Sheng Chen
10:00-10:15	Remote Sensing of Polar Sea Ice	Hongjie Xie*
10:15-10:30	Spectra Reflectance Characteristics of Different Snow and Snow-covered Land Surface Objects and Mixed Spectrum Fitting	Jiahua Zhang*, Zhengming Zhou

## **OS36[Room B]: Remote Sensing Data for Hydrological Applications (2)**

**Co-Chairs: Hongjie Xie & Shibo Zhu**

10:45-11:00	Applying SAR Interferometric Coherence to Outline Debris-Covered Glacier	Zongli Jiang*, Shiyin Liu, Xin Wang, Jian Lin, Sichun Long
11:00-11:15	Monitoring Transport of Suspended Sediment in the Nanhui Nearshore Integrating Remote Sensing Images with Hydrodynamic Model	Runyuan Kuang*, Yunxuan Zhou, Yuanfeng Zhu
11:15-11:30	A Bayesian Approach to Estimating Snow Water Equivalent from Passive Microwave Measurements	Desheng Liu*, Mike Durand
11:30-11:45	Seasonal snow cover variations in the Nam Co Basin of Tibetan Plateau using MODIS data	Guoqing Zhang*, Hongjie Xie, Yang Gao
11:45-12:00	Snow Monitoring of Xinjiang Using MODIS data	Yuanyuan Zhang*, Hua Fu, Erfu Dai
12:00-12:15	Intra- and Inter-annual Changes of Sea Ices in the Liaodong Bay	Shibo Zhu*, Zhongxin Chu, Lianjie Zhang, Xiao Xiao, Qian Zhao



**OS37[Room C]: Land-use and Land-cover Changes (1)****Co-Chairs: A-Xing Zhu & Yuming Wen**

08:30-08:45	Land Use Change and Its Ecosystem Service Value In the Ecological Vulnerability Area of Western Part of China	Xamxi Aytursun, Xiaobin Jin, Qian Wang, Yinkang Zhou
08:45-09:00	Land Cover Change Comparative Analysis of High Latitude Terrestrial Transects of IGBP/GCTE	Yan Kong*, Hong Jiang, Wei Xu, Xiuying Zhang
09:00-09:15	Empirical Study on Adjustment of Land Use Around Track Transit Site: An example of Nanning City, China	Yongfu Li*, Anrong Dang, Hongying Cao
09:15-09:30	Environmental Evaluation of Land Use In Zaoyang, China, by Using GIS and Remote Sensing	Zhiyu Ma, Caixue Ma*, Ciwei Dong
09:30-09:45	Forecasting Land Use Change with a CA and Agent-based Model to Facilitate Transportation Analysis: A Case Study of Orange County, FL	Liyuan Zhao, Zhong-ren Peng*
09:45-10:00	Dynamic Monitoring of Land Use/Cover Changes Based on CBERS Imagery	Li Wang*, Fu Chen
10:00-10:15	Application of Multi-temporal and Multi-source Data for Land Cover Change Detection in Guam, USA	Yuming Wen*

**OS38[Room C]: Land-use and Land-cover Changes (2)****Co-Chairs: A-Xing Zhu & Huaifei Shen**

10:30-10:45	Modeling Conversion of Rural-Urban Land Use Based on Cellular Automata and Genetic Algorithm	Kai Cao*, Shaowen Wang, Xia Li, Ran Chen
10:45-11:00	Monitoring Coastal Zones Land use and Land Cover Changes Using Remote Sensing: A Case Study of Jiangsu, China	Yuxuan Dai*, Xiaoxiang Zhang, Changqing Yan, Huijuan A, Chenxi Zhu
11:00-11:15	Measurement of Land Use Pattern Based on Spatial Adjacency	Lina Lv*, Xinqi Zheng, Jing Deng
11:15-11:30	Land Use Spatial Pattern Characteristics along the Terrain Gradient in Yellow River Basin in West Henan Province, China	Huaifei Shen*
11:30-11:45	Research of Land Use Interpretation Based on 3S in Liugou of Penglai (A Case Study in Shandong, China)	Feng Wang*, Bingfu Jin, Wenwen Wang, Zhonglong Wang
11:45-12:00	Land Use\Cover Change Study of Lianyungang Coastal Zone Based on Remote Sensing	Hongquan Xie*, Yanyan Zhang, Xia Lu
12:00-12:15	Land Use Changes in Baishan City of Jilin Province, China Based on Temporal Trajectory Analysis Method	Xuemin Zhang*, Fang Huang, Fanshuang Deng
12:15-12:30	Land Use and Land Cover Change Detection Techniques: A Data-driven and Application Based Perspective	Chen Zeng*, Yanfang Liu, Ge Cui, Wei Liu, Jiameng Hu

## **OS39[Room D]: GIS in Geology and Earth Science**

**Co-Chairs: Qihao Weng & Fang Wang**

08:30-08:45	Application of Technology Combined GIS and Transient Electromagnetic Technique in Coal Mine Water Burst Prevention — A Case of Sihe Coal Mine	Min Guo*, Xiaosu Chen, Wenfeng Liu, Yufei Wang
08:45-09:00	Uncertainty Mapping Method for Mineral Resources Prospectivity Integrating Multi-source Geology Spatial Data Sets and Evidence Reasoning Model	Binbin He*, Ying Cui, Cuihua Chen, Jianhua Chen, Yue Liu
09:00-09:15	Paleolake Alteration Research of Southeast Shandong since Holocene Based on GIS	Handong He*, Anbo Li
09:15-09:30	Prediction of Meteorite Concentration Areas in Prince Charles Mountains, East Antarctica	Fang Wang*, Xiao Cheng, Yan Liu, Fengming Hui, Tingbiao Chen, Yufang Ye, Zhixin Wang, Chen Zhao
09:30-09:45	Application of Raster Data-Based Spatial Analysis in Oil and Gas Migration	Qing Wang*, Dongsheng Wu, KeYan Xiao, JiaHua Zhang
09:45-10:00	An Extensible Borehole Log Model	Chi Zhang*, Anbo Li, Liangchen Zhou
10:00-10:15	The Sensitivity Evaluation of Ground Fissures in Yuncheng, Shanxi, China with GIS and AHP Method	Jing Zhang*, Qin Zhang, Chaoying Zhao, Feifei Qu

## **OS40[Room D]: Representation and Visualization of Geospatial**

### **Data (1)**

**Co-Chairs: Qihao Weng & Ye Zhi**

10:30-10:45	Dynamic Response of 3-D Vehicle-born Laser Point Cloud and 2-D Symbol Based on the ArcGIS Engine	Qiong Hu*, Ruofei Zhong, Bin Dai
10:45-11:00	A Viewshed Approach on Identifying the Street Spatial Outline	Ziyu Tong*
11:00-11:15	An Integrated Online Environment for Comparative Flow Mapping Analytics	Shaowen Wang*, Danhuai Guo, Shaowen Wang, Kaichao Wu, Zhenhua Zhang, Yuwei Wang, Jianhui Li, Chao Kang
11:15-11:30	Building the Virtual Reality GIS Based on Browser/Service	Yan Zhang*, Weiling Li, Liang Liu
11:30-11:45	A Processing and Scheduling Method for Vector Rendering in Global 3D GIS	Xuzhao Zhang, Zhengwei Sui, Lun Wu, Heng Cai, Ye Zhi*, Zhiyuan Qiao

## **OS41[Room E]: Acquisition and Processing of RS Data (1)**

**Co-Chairs: Minhe Ji & Yanfang Xiao**

08:30-08:45	The Removal of Light-shade Stripe from Multi-spectral TM Image and Optimization	Jiazhi Chen*
08:45-09:00	Applying GPU and POSIX Thread Technologies in Massive Remote Sensing Image Data Processing	Yuehu Liu*, Bin Chen, Hao Yu, Yao Zhao, Zhou Huang, Yu Fang
09:00-09:15	Determining the Aerosol Type over Case II Waters through Aerosol Component Concentration Iteration Algorithm	Bin Peng*, Qingjiu Tian, Ying Bao, Ling Wang
09:15-09:30	Atmospheric Correction of HJ-1 CCD Image by Using MODIS for Coastal Water	Yanfang Xiao*, Wenji Zhao, Huili Gong, Xiaomeng Liu
09:30-09:45	Scale Conversion of Multi Sensor Remote Sensing Image Using Single Frame Super Resolution Technology	Hankui Zhang, Bo Huang*
09:45-10:00	Sea Surface Temperature Extraction and Spatial Distribution Based on Long Time Series MODIS Data	Xia Lu*, Minglian Jiao, Hongquan Xie, Chang-e Dou

## **OS42[Room E]: Acquisition and Processing of RS Data (2)**

**Co-Chairs: Minhe Ji & Jinsongdi Yu**

10:30-10:45	Urban Forest Classification Using the Worldview-2 8-Band Hyperspatial Imagery: A Multi-Level Object-Based Approach	Fang Qiu*, Harini Sridharan
10:45-11:00	LiDAR Data Acquisition Methods in Emergency Management Applications	Fei Wang*
11:00-11:15	Kriging Interpolation Method and its Application in Retrieval of MODIS Aerosol Optical Depth	Chao Yu*, Liangfu Chen, Lin Su, Meng Fan, Shenshen Li
11:15-11:30	Prediction and Map-making of Soil Organic Matter of Soil Profile Based on Imaging Spectroscopy: A Case in Hubei China	Meiqin Zhang*, Shanqin Wang, Shuo Li, Jing Yi, Peng Fu
11:30-11:45	RS Image Batch Processing in Grid	Xuqing Zhang*, Guodong Yang, Shengbo Chen, Jizhang Fan, Xiaohui Wei
11:45-12:00	On the Systematic Generation of Reference Output for Geo Image Services	Jinsongdi Yu*, Peter Baumann

**OS43[Room F]: Information Extraction from RS Data (2)****Co-Chairs: Xiao Cheng & Bailang Yu**

08:30-08:45	Extraction of the Corn Planting Area Based on Multi-temporal HJ-1 Satellite Data	Jun Liu*, Yan Huang, Lingtong Du, Ling Wang
08:45-09:00	Extraction of Water-body in Remote Sensing Image Based on Logic Operation	Dong Liu*, Yan Li
09:00-09:15	Extraction of Sandbank Shoreline of Jiangsu Based on Wavelet Transformation	Yongxing Wang*, Yongxue Liu, Manchun Li, Shuo Yan, Xiaowei Ma, Shuai Zhang, Jing Zhang
09:15-09:30	Extracting Indication Information of Floating Population Using SPOT5 and Ground Data: a Case Study of Xiamen, P. R. China	Xiaoxia Yan*, Guangfa Lin, Lijie Lin
09:30-09:45	Impacts of Ice Storm on Forest Gross Primary Productivity Detected Using Multi-source Remote Sensing Data	YanJun Zhu*, Weimin Ju, Yanlian Zhou

**OS44[Room F]: Information Extraction from RS Data (3)****Co-Chairs: Xiao Cheng & Bailang Yu**

10:30-10:45	Winter Wheat Area Extraction and Estimation of Jiangsu Province Based on MODIS-VI Time Series and Multi-temporal HJ CCD Images	Shanshan Li*, Qingjiu Tian
10:45-11:00	The Research of Remote Sensing Geological Interpretation in Long-zhang Expressway of Hunan	Hongjiang Mao*, Rui Liu, Qingkai Meng, Ting Zhang
11:00-11:15	The Accurate Classification Approaches for Remote Sensing Image Based on GIS and RS	Jingmeng Wang*, Xiaoyu Guo, Wenji Zhao, Zhaoning Gong, Juan Long, Ke Liu
11:15-11:30	The Aerosol Optical Properties Measurement by Ground Remote Sensing in Shanghai and Guangzhou of China	Bin Wang*, Hong Jiang, Jian Chen, Guomo Zhou, Zishan Jiang
11:30-11:45	Time Series Analysis of Urban Growth Using DMSP-OLS Nighttime Light Dataset 1992-2009	Genong Yu*, Peisheng Zhao, Liping Di
11:45-12:00	InSAR Detection of Residual Settlement of Ocean Reclamation Areas in Shenzhen, China	Qing Zhao*, Hui Lin, Fulong Chen, Wei Gao

## **OS45[Room G]: Spatial Database and Data Management (1)**

### **Co-Chairs: Fahui Wang & Yunqin Zhong**

08:30-08:45	A New Matching Algorithm for Chinese Place Names	Gang Cheng*
08:45-09:00	A Multiple Representation Data Structure of 3D Building Textures	Bo Mao*, Yifang Ban
09:00-09:15	A Self-Index GML Storage Approach Based on Element Coding	Weili Wang*, Jihong Guan, Long Zhang, Zhiping Qian
09:15-09:30	Application of Data Warehouse Technology in Digital Mine Information System	Li Wang*
09:30-09:45	A Study on Erhai Lake Environment Information Service Base on ArcGIS and Flex	Yulian Yang*, Li Shao, Yanhui Zhu, Kun Yang
09:45-10:00	Application and Research of the MapX Integrated Technology on the Fire Protection Attemping Commend Management	Bin Yang*, Dezheng Gao, Jiandong Wei, Qing Wang
10:00-10:15	A Novel Method to Manage Very Large Raster Data on Distributed Key-Value Storage System	Yunqin Zhong*, Shangchun Sun, Haojun Liao, Yanwei Zhao, Jinyun Fang

## **OS46[Room G]: Land-use and Land-cover Changes (3)**

### **Co-Chairs: Fahui Wang & Hongshuo Wang**

10:30-10:45	The Land-use Change Detection Method Using Object-based Feature Consistency Analysis	Xue Li*, Ning Shu, Jian Yang, Liang Li
10:45-11:00	The Construction of Higher Temporal and Spatial Resolution Land Use/Land Cover Database of China: from 1911 to 2010	Wenjie Li*, Shihuang Zhang
11:00-11:15	A Method for Monitoring Arable Land Loss in Urban Sprawl Areas Using Object-based Analysis Approach : a Case of Changzhou, Jiangsu	Xiaowei Ma*, Feixue Li, Manchun Li, Yongxing Wang, Jing Zhang
11:15-11:30	A GIS-based Urban Landscape Study of Lanzhou City, China	Caihong Meng*, Yongchun Yang, Haojie Hu
11:30-11:45	Analysis and Prediction of Land use and Land cover Change: A Case Study of Minjiang River, China	Jie Meng*, Xiaoxiang Zhang, Xingnan Zhang, Yan Xie, Baohua Yuan
11:45-12:00	An RS and GIS Analysis on Land-Use / Cover Change in East River Valley, China	Wei Shi*, Guoping Wu, Linyan He, Gongxun Chen, Chao Jiang Yanrong Wang
12:00-12:15	Monitoring Sub-pixel Percent Forest Cover Using Multi-temporal NDVI	Hongshuo Wang*, Jinsong Chen, Hui Lin
12:15-12:30	The Simulation of Land Use Change by Using CA-Markov Model—A Case Study of Tainan City, Taiwan	Yi-chen Lee*, Hsuehsheng Chang

**OS47[Room H]: Pollution****Co-Chairs: Peisheng Zhao & Junyan Zhao**

08:30-08:45	Urban Carbon Emissions Trends and the Effect of Mitigation Measures	Rui Huang*, Zheng Wang, Yongbin Zhu, Xiaozhe Ma, Xiao Liu Liu, Changxin Liu Liu
08:45-09:00	Prediction on Carbon Emissions Trend in Beijing Tianjing and Hebei Province	Xiao Liu*, Zheng Wang, Rui Huang
09:00-09:15	Variations of Atmospheric SO <sub>2</sub> and NO <sub>2</sub> Pollution in Yangtze River Delta of China	Xiaohua Xu*, Hong Jiang, Xiuying Zhang
09:15-09:30	Analysis of China's Provincial Carbon Emissions Factors Spatial Differences Based on Geographically Weighted Regression Model	Shiyan Zhai*, Zheng Wang
09:30-09:45	A Method to Estimate the Spatial Distribution of Transport Carbon Emissions in Shanghai	Junkui Zhang*, Junyan Zhao, Siqi Jia, Qi Li, Shuai Liu
09:45-10:00	A MapReduce Framework for On-road Mobile Fossil Fuel Combustion CO <sub>2</sub> Emission Estimation	Junyan Zhao*, Junkui Zhang, Siqi Jia, Qi Li, Yue Zhu

**OS48[Room H]: Processing and Applications of High-resolution****Imagery****Co-Chairs: Peisheng Zhao & Yaojie Yue**

10:30-10:45	Monitoring Urban Turf Quality Using Very High Resolution Satellite Imagery	Wei Huang*, Jianbo Hu, Tao Lu, Wei Chen, Xingyuan He
10:45-11:00	A Seam-line Optimized Method Based on Difference Image and Gradient Image	Jun Pan*, Mi Wang
11:00-11:15	Monitoring Taihu Water Quality by Using High Resolution Satellite Image	Jianwei Tao*, Zili Zhang, Wenxian Yu
11:15-11:30	An Object-oriented Method for Road Damage Detection from High Resolution Remote Sensing Images	Yanping Wang*, Yanbin Wang, Yong Da, Xiaoyan Liu, Jiebo Li, Jingyi Huang
11:30-11:45	A Composed Statistical Pattern Recognition and Geosciences Analysis Approach for Segmentation-based Remotely Sensed Imagery Classification	Yaojie Yue*, Qinqing Shi, Guofang Hu, Jing'ai Wang

**PS05[Lobby]: Poster Session (5) (08:30-10:30)**

MobilePulse: Dynamic Profiling of Land Use Pattern and OD Matrix Estimation from 10 Million Individual Cell Phone Records in Shanghai	Zhengyu Duan, Liang Liu*, Shang Wang
Key Technology of Water Environmental Data Sharing Platform---With the Sample of Liao River Basin	Laiping Luo*, Jing Zhang, Lifang Zhu, Hua Zhong
Extraction Building Based on Adaptive Detection Algorithm of Key Points	Wei Shao*, Youjing Zhang, Lingling Wang, Liwen Chen, Zhiqi Qian
A Study on Construction of 3 Dimension River Topographical Information and Its Efficiency Using LiDAR Data	Hyen Cheol Park*, Yun-Jae Choung, Myung-Hee Jo
An Efficient Stereo Displaying Method Of Huge 3D Scene	Ming Liao*, Liangchen Zhou, Guonian Lv, Yan Cao, Huabing Li
Inversion of Reed Leaf Chlorophyll Content Based on PROSPECT Model	Qian Miao*, Wenji Zhao, Xiaoyu Guo, Ke Liu, Jie Han, Zhiheng Wang
Hydrologic Information Extraction for Flood Disaster Risk Assessment in Pearl River Basin and Luan River Basin, China	Jing Zhang*, Liurui Song, Fan Feng, Huili Gong
Grassland Biomass Dynamic Monitoring on Qinghai-Tibet Plateau Based on the Microwave Vegetation Indices	Tiangang Liang*, Hui Yu, Wei Wang, Qi-sheng Feng, Xiao-dong Huang
Geo-Ontology Model based on Description Logic	Zhenchao Wang*, Manchun Li, Feixue Li
Geographic Stereo Video Web Service Based on the REST Architecture	Zhigang Han*, Yunfeng Kong, Xi Wang
Geographic Information Sharing Based on Metadata Directory Service	Zhenchao Wang*, Manchun Li, Guirong Xiao
Interaction between Water and Carbon Cycles in Lushui River Basin Simulated using an Ecological Model Driven by Remote Sensing	Dengqiu Li*, Xianfeng Li, Weimin Ju
The Change Detection of Impervious Surface and its Impact on Runoff in the Qinhuai River Basin, China	Jinkang Du*, Caili Li, Hanyi Rui, Qian LiDapeng Zheng, Youpeng Xu, Shunfu Hu
Correlation between MODIS Aerosol Optical Depth and Air Pollution Index—A Case Study of Zhengzhou City in Henan Province, China	Chenglin Li*, Yong Liu, Hongwei Tian
Coastline Monitoring with CEBERS 02B HR High-resolution Data	Zhen Li*, Manchun Li, Liang Cheng, Yongxue Liu, Wenting Cai
Analysis and Evaluation on Fusion Methods of Medium and High Spatial Resolution Remote Sensing Image	Yuhong Ding, Yanhui Wang*
Design and Implementation of Municipal Facilities Management System based on Mobile Mapping System and Wireless Transmission System	Yang Liu, Mingyi Du, Guoyin Cai
Design and Realization of Technical Service System for Urban Blank-odor River Treatment Based on Web Technology	Yulan Hou*, Honglin Li, Jun Wang, Zhihong Li, Zhenlou Chen

**PS06[Lobby]: Poster Session (6) (10:30-12:30)**

Forest Form Mapping System for Managing Forest Resource: Design and Implementation	Ruren Li*, Ruixiu Wang, Xinyue Ye
Extracting Spatial Relations from Document for Geographic Information Retrieval	Yecheng Yuan*
Expression of GIS Maps Based on Flex	Jirong Luo*, Guirong Xiao
Estimation Above-Ground Biomass of Wetland Bulrush in Qaidam Basin, China, Combining Regression Model with Vegetation Index	Pingjing Xie, Binbin He, Minfeng Xing*
Design Development of Consolidation Project Management System in Guangdong Province	Yun Ye*, Yueming Hu, Zhixiong Fu, Jinhao Zhou, Xiaofeng Ning, Lu Wang
Design and Realization of Precision Agriculture Information System Based on 5S	Xiaoshan Wang*, Qingwen Qi
Correlations between Water Quality Indexes and Mid-infrared Spectra in River Network Areas of Suzhou City	Ligang Fang*, Hongli Li, Liya Sun, Hengxing Xu
Comparative Study on Landscape Construction and its Dynamic of Typical City Areas in Mongolia Plateau and Transbaikal Region A Case Study of Ulaanbaatar, Mongolia and Ulan-Ude, Russia	Lijun Zhu*, Juanle WANG, A Beshentsev
Calculation Methods of Territorial Development Intensity Using DMS/OLS Data	Tao Yuan*, Xinqi Zheng, Wei Zhou
Assessing Soil Erosion Risk in the Hilly-gullied Area -A Case Study of Luoyugou Watershed in Tianshui, Loess Plateau, North China	Qi Shen*
Application of Minerogenetic Prediction Based on Remote Sensing and GIS	Kefa Zhou*, Nannan Zhang, Haibo Zhang
Extracting Impervious Surface by CART Method according to Different Brightness Values from Remote Sensing Imagery	Qian Li*, Jinkang Du, Hanyi Rui, Dapeng Zheng, Caili Li
Effects of Spatial Scale on Distributed Flood Simulation Based on HEC-HMS Model : A Case of Jinjiang Watershed, Fujian, China	Fen Chen*, Jianbin Xie, Xingwei Chen
Monitoring Urban Growth and Ecological Environmental Responses Based on Remote Sensing Images	Ying Chen*, Shaojie Chen, Peijun Du, Junshi Xia, Dandan Shan
Spatiotemporal Modeling of 2000-2009 Financial Development in Yangtze River Delta Using Support Vector Machine and Clustering Analysis	Wei Wei*, Minhe Ji
Spatial Structure of Tourist Attractions in Nanjing, China_Based on Statistical Analysis of 317 Tourist Attractions	Lei Ding*, Yu Wang, Fangyi Zhang, Xiaogen Wu, Shu Tang
Dynamic Detection of Land Cover Change in Beijing Combining TM and ASTER Images	Guoyin Cai*, Mingyi Du, Yang Liu
Design of Integrated Toolkit for Urban Natural Disaster Risk Research Based on GIS	Jun Wang*, Mingwu Ye, Yaolong Liu, Shiyuan Xu
A New Method of Restoring ETM+ SLC-off Images Based on Multi-temporal Images	Wei Hu*, Manchun Li, Yongxue Liu, Qiuhaohuang, Kun Mao



## June 26 (Afternoon, 13:30-17:30)

### OS49[Room A]: Geospatial simulation (1)

**Co-Chairs: Xiang Li & Dong Cai**

13:30-13:45	Implementation of a Vector-based Cellular Automata Model for Simulating Land-use Changes	Min Cao*
13:45-14:00	Simulating the Carbon Storage of Spruce Forests Based on the FORECAST Model and Remotely Sensed Data	Chengyue Jie*, Hong Jiang, Guomo Zhou, Xiaohua Wei, Juan Blanco, Zishan Jiang, Zanhong Xin
14:00-14:15	Back Propagation(BP)-Neural Network for Tropical Cyclone Track Forecast	Yuanfei Wang*, Wei Zhang, Wen Fu
14:15-14:30	A Simulation Model of Pedestrian Flow Based on Geographical Cellular Automaton	Shuai Zhang*, Manchun Li, Feixue Li, Aili Liu, Dong Cai
14:30-14:45	Simulation of Agricultural Landscape Dynamics Using Cellular Automata	Wenjie Zhao*

### OS50[Room A]: Geospatial simulation (2)

**Co-Chairs: Xiang Li & Mingchao Jia**

15:30-15:45	The Simulation of Land Use Change in Erhai Basin Based on Agent Based Modeling	Kewei Chen*, Yunliang Li, Yongmei Yang, Kun Yang
15:45-16:00	Simulation of Deep-Water Waves Based on JONSWAP Spectrum and Realization by MATLAB	Qiuying Guo*, Zunyi Xu
16:00-16:15	Simulation of Ecosystem Service Value Responding to Land Use Planning in the Region around Dianchi Lake, China	Mingchao Jia*, Manchun Li, Feixue Li Zhenjie, Chen
16:15-16:30	Urban Rainstorm Waterlogging Disaster Simulation of Guiyang Based on 3S Technology	Fengyun Mu*, Nianjun Li
16:30-16:45	SNR Simulation with TDI Set for Lake Water Color Monitoring Oriented Satellite RS System	Jia Tian*
16:45-17:00	The Simulation of the Evolution Processing of the Tailings Dam-Break Utilizing Three-Dimensional GIS Technology	Mingming Zhang*, Zhenyu Yuan, Yihui Chen
17:00-17:15	GIS-based Simulation of Emergency Management for Leak of Gaseous / Volatile Toxic Substance	Xingming Zhang*, Jing'ai Wang, Yinle Sun

**OS51[Room B]: Information Extraction from RS Data (3)****Co-Chairs: Fang Qiu & Yuntao Lu**

13:30-13:45	Monitoring NPP Changes in Changbai Mountain Area, China with MODIS Images	Fang Huang*, Xin Qi, Shuangling Xu
13:45-14:00	Monitoring the Phenological Responding to Global Changing in Northeast Asia Based on Remotely Sensed Vegetation Index	Jiaxin Jin*, Hong Jiang, Xiuying Zhang, Ying Wang
14:00-14:15	Object Extraction of Remote Sensing Image by Agent and Group Collaboration Technology	Yuntao Lu*, Shanzhen Yi, Yajuan Xie
14:15-14:30	Mapping Leaf Area Index for the Urban Area of Nanjing City, China Using IKONOS Remote Sensing Data	Jiande Ma*, Weimin Ju
14:30-14:45	Robust Segmentation of Building Points from Airborne LiDAR Data and Imagery	Wei Zhao*, Liang Cheng, Lihua Tong, Yongxue Liu, Manchun Li
14:45-15:00	Multifractal Based Country Road Information Extraction from Geoeye-1 Image	Ziyong Zhou*, Na Cong

**OS52[Room B]: Information Extraction from RS Data (4)****Co-Chairs: Fang Qiu & Zhengwei Yang**

15:30-15:45	Apply Two Hybrid Methods on the Rainfall-induced Landslides Interpretation	Kuan-Tsung Chang*, Jin-Tsong Hwang, Jin-King Liu, Edward-Hua Wang, Chu-I Wang
15:45-16:00	Automate Green Coverage Measure Using a Novel DIA Method: UIP-MGMEP	Jianbo Hu*, Wei Huang, Tao Lu, Wei Chen, Xingyuan He
16:00-16:15	Evaluating the Relative Feature Importance of Spectral, Topographic, and Texture Features in the Ecosystem Classification	Xin Miao*, Jill S. Heaton
16:15-16:30	Construction and Implementation of Fire Recognizing and Analyzing System Based on MODIS Image	Yongqiang Ren*, Sa Wang, Zhaofeng Du, Zhaoqin Gu
16:30-16:45	Change Detection Based on Iterative Invariant Area Histogram Matching	Zhengwei Yang*, Wei Zhang, Wei Wang, Qiongcheng Xu

## **OS53[Room C]: 3D Modeling and DEM**

### **Co-Chairs: Wei Luo & Shaobo Jiang**

13:30-13:45	Multi-resolution Representation of 3D Complex Building Models with Features Preservation	Shaobo Jiang*, Bisheng Yang, Xuan Sun
13:45-14:00	3D Dynamic Modeling and Interactive Query of Underground Roadway	Mei Li*, Shanjun Mao, Heng Wang, Bentao Lu
14:00-14:15	Estimating Incision Depth of Martian Valleys from DEM Data	Wei Luo*, A. D. Howard and J. Trischan
14:15-14:30	3D Geological Modeling from DEM, Boreholes, Cross-sections and Geological Maps	Jinhai Qiao*, Mao Pan, Zhaoliang Li, Yi Jin
14:30-14:45	Implementing Spatiotemporal Kriging Interpolation Based on 3D Model	Aiping Xu*, Yuan Tang, Hong Shu
14:45-15:00	3D-Reconstruction of Wear Surface from SEM Combining Digital Speckle Correlation Technique	Liwen Zhang*, Rui Wu, Danwen Zhang, Juan Sun
15:00-15:15	Effects of Interpolation Parameters in Multi-Log Radial Basis Function on the Interpolation Accuracy of DEM	Jinming Zhang*, Xiong You

## **OS54[Room C]: Geo-ontology**

### **Co-Chairs: Wei Luo & Qiaoli Zhu**

15:30-15:45	Construction Method of Geomorphic Classification Knowledge Base Based on Ontology	Hu Chen*, Hongwei Li, Leilei Ma, Rupeng Liang, Bowei Wen
15:45-16:00	Using Spatial Ontology Methodology to Implement Spatial Information Integration in the Cloud Environment	Xiaosan Ge*, LeLe Tong, Yan Zhang, Haiyang Yu
16:00-16:15	Ontology-based Discovery of Information-An Application in Directory Service System of Yellow River Data Resources	Yan Li*, Feixue Li
16:15-16:30	Construction of Semantic Location Model Based on Typonym Ontology	Rupeng Liang*, Hongwei Li, Qinchao Li, Leilei Ma, Hu Chen
16:30-16:45	The Domain Ontology of Typhoon Disasters and Its Application	Zhihai Yang*, Guangfa Lin, Junming Chen
16:45-17:00	An Integrated Spatial DSS Design in Hydroinformatics Based on Ontology and Domain Modeling	Shanzhen Yi*, Yajuan Xie, Yuntao Lu
17:00-17:15	Construction of Geo-Information Conceptual Classification System Based on Ontology	Qiaoli Zhu*, Zongyi He
17:15-17:30	User Behaviour in Triple Space: Working in a Coordinated Multiple View (CMV) Environment	Xia Li*, Menno-Jan Kraak, Kai Cao
17:30-17:45	An Exploratory Framework for Studying Movement Pattern	Yin Liu*

## **OS55[Room D]: Representation and Visualization of Geospatial Data (2)**

**Co-Chairs: Xin Miao & Xueyong Yin**

13:30-13:45	Management and Visualization of Laser Scanning Point Cloud Data Based on the Virtual Global Platform	Tingting Cui*, Jianya Gong, Jie Shan, Xianfeng Huang, Jiansi Yang
13:45-14:00	TR32DB – Management and Visualization of Heterogeneous Scientific Data	Constanze Curdt*, Dirk Hoffmeister, Christian Jekel, Sebastian Brocks, Guido Waldhoff, Georg Bareth
14:00-14:15	To Visualize Spatial Data Using Thematic Maps Combined with Infographics	Manli He*, Xi Tang, Yuming Huang
14:15-14:30	Visual Perception of Traditional Garden Space in Suzhou, China--A Case Study with Space Syntax Techniques	Zhiming Li*
14:30-14:45	Terrain Visibility Analysis Method Based on Depth Mapping	Chenhao Wang*, Xiaoran Tang, Boning Ma
14:45-15:00	The Application of GIS Visualization in Landscape Planning and Design—A Case Study of Nanjing Zhongshan Scenic Area	Yue Xu*
15:00-15:15	The Warn Notice Toolbox: Open-Source Geo-visualization of Large Lay-off Events Data	Xinyue Ye*, Michael Carroll
15:15-15:30	The Data Management and Visualization of Water and Sediment for Two-dimensional, a Case Study of the Lower Reaches of Yellow River	Xueyong Yin*, Na Li, Ruixun Lai

## **OS56[Room D]: Land-use and Land-cover Changes (4)**

**Co-Chairs: Georg Bareth & Yuyao Ye**

15:45-16:00	The Need for Intelligent Land Use Data	Georg Bareth*
16:00-16:15	Using Remote Sensing and GIS to Analyze Land Use/Cover Change and Urban Expansion in Xining City of Qinghai Province, China	Xiaohong Gao*, Shichao Feng, Jian Kang, Guoliang Wu, Lifeng Guo, Chan ZouJunjun Yang, Yanjiao Zhang
16:15-16:30	Urban Spatial Expansion of Xiangtan City, China	Fang Liu* Zengxiang Zhang, Feifei Sun, Lijun Zuo, Xiao Wang
16:30-16:45	Spatial Association Rules Mining for Land use Based on Fuzzy Concept Lattice	Jiqiang Niu*, Yang Zhang, Wenjuan Feng, Lele Ren
16:45-17:00	Street Centrality and Urban Land Use Patterns	Fahui Wang*
17:00-17:15	The Construction Land Expansion and the Influence of Site Factors of the Pearl River Delta, China	Yuyao Ye*, Hongou Zhang, Kai Liu, Qitao Wu

## **OS57[Room E]: GeoInformatics in Disaster Risk Research (4)**

### **Co-Chairs: Wenzhong Shi & Feng Zhou**

13:30-13:45	Drought Disaster Risk Assessment and Mapping at Different Scales Based on RS and GIS	Dan Fang*, Zhuowei Hu, Zhiheng Wang, Guangyao Duan
13:45-14:00	Landslide Vulnerability Evaluation: A Case Study from Sichuan, China	Ting Liao*, Deyong Hu, Xiaoxuan Li, Yangsiqi Chen
14:00-14:15	GIS-Based Analysis of Flood Disaster Risk in LECZ of China and Population Exposure	Jianli Liu*, Jiahong Wen, Kai Yang, Zhaoyi Shang, Haiying Zhang
14:15-14:30	Coastal Erosion Risk Assessment of Sandy Coast Based on GIS and RS	Deming Ma*, Aiping Feng, Sangyun Wu, Ping Li, Feng Cai, Jianhui Liu
14:30-14:45	Effects of Groundwater Level Fluctuations on Deformation of Baishuihe Landslides, China	Xueling Wu*, Ruiqing Niu
14:45-15:00	Development of Typhoon Disaster Risk Evaluation and Early Warning System Integrating Real-time Rainfall Data from the Satellite	Liwei Xing*, Deyong Hu, Lili Tang
15:00-15:15	Flood Submergence Simulation and Risk Analysis Based on GIS in Plain Area	Feng Zhou*, Youpeng Xu, Xian Luo

## **OS58[Room E]: GeoInformatics in Disaster Risk Research (5)**

### **Co-Chairs: Wenzhong Shi & Maohui Zheng**

15:30-15:45	Post-Seismic Deformation Detection Using Permanent Scatterers Technology for East Kunlun Fault After 2001 Kokoxili Earthquake	Yanmei Zhang, Zaisen Jiang, Xiao Cheng*
15:45-16:00	Technique of Dynamically Warning of Coalmine Gas Outburst Based on Bayesian Network	Yang Li*, Shanjun Mao, Hong Xie, Hongzhi Xu, Mei Li
16:00-16:15	Method for the Early Warning of Shallow Landslides in Sichuan Province	Xiaoxuan Li*, Deyong Hu, Ting Liao, Yangsiqi Chen
16:15-16:30	Service-Oriented Integration and Application of Earthquake Emergency Information	Xianghong Wang*, Jiping Liu, Yong Wang, Shenghua Xu
16:30-16:45	Uncertainty Information Fusion for Flood Risk Assessment Based on DS-AHP Method	Yajuan Xie*, Shanzhen Yi, Yang Cao, Yuntao Lu
16:45-17:00	Research and Development of Coalmine Hazard Monitor Control and Early Warning System	Hongzhi Xu*, Shanjun Mao, Yang Li, Xinying Zhu, Hong Xie, Mei Li
17:00-17:15	Numerical Simulation and Analysis of Hazardous Gas Dispersion in Urban Sub-domain	Maohui Zheng*, Yuerong Guo, Xuezhi Feng, Pengfeng Xiao

## **OS59[Room F]: Spatial Intelligence**

### **Co-Chairs: Shuming Bao & Weifeng Zhou**

13:30-13:45	The Development of 3D City Model and Its Applications in Urban Planning	Ran Chen*
13:45-14:00	Topology Constrain for River Dimension-reducing Generalization in Land-use Map	Baode Jiang*, Zhong Xie, Xincai Wu, Liang Wu, Lin Zhou
14:00-14:15	Spatial Clustering Considering Spatio-temporal Correlation	Kun Qin*, Yixiang Chen, Yong Zhan, Fangyuan Cheng
14:15-14:30	Urban and Regional Explorer with Spatial Intelligence	Bing She*, Xinyan Zhu, Shuming Bao
14:30-14:45	Virtual Garden Museum System of Zhuozhengyuan	Chaoyang Fang, Jian Xu*, Ying Xu
14:45-15:00	An Intelligent Information Sharing Method of Heterogeneous Geographic Data Based on Unified Metamodel and Entity Matching	Shanzhen Yi*, Yuntao Lu
15:00-15:15	A Research of the Ancient Academies in Ganpo Area based on GIS	Chaoyang Fang, Ying Zeng*, Hui Lin
15:15-15:30	The Offshore Fishing-grounds Environmental Analysis and Application Research of Remote Sensing Information	Weifeng Zhou*, Xuesen Cui, Yumei Wu, Sufang Zhou, Wei Fan

## **OS60[Room F]: Spatial Intelligence and Digital City**

### **Co-Chairs: Shuming Bao & Chunyan Zheng**

15:45-16:00	A Fuzzy Decision Method for Direction Relations Based on Spatial Cognition	Di Chen*, Chunhui Zhou, Xinyan Zhu
16:00-16:15	Constructing the Geospatial Framework of Digital City	Bin Cheng*, Chengming LiLong Fei, Jizhou Wang
16:15-16:30	The Study of Urban Functions Change under the Digital City Construction in the Hilly Resource-Based City of Panzhihua, China	Guoming Li*, Xuben Wang, Aike Kan, Guoqing Li, Feng Liu, Xiaoping Wu
16:30-16:45	A Foveal Vision Based Spatial Prefetch Method on Digital Earth Platform for Performance Improvement	Yi Liu*, Wenwen Tian
16:45-17:00	Spatial Range Expression Method of Geographical Entity with Uncertain Boundary	Leilei Ma*, Hongwei Li, Li Li, Hu Chen, Rupeng Liang
17:00-17:15	Design and Development of Intelligent Automatic Generalization Process Control System	Haizhong Qian*, Qiang Zhu, Junkui Xu, Lei Ge Min Guo, Zhishen Huan
17:15-17:30	The Selection of Scattered Settlements Based on Ant Colony Optimization Algorithm	Chunyan Zheng*, Huake Hu, Huiqiong Xia

## **OS61[Room G]: Geospatial Web Service**

### **Co-Chairs: Shaowen Wang & Lin Wan**

13:30-13:45	A Geospatial Service Composition Method Based on Temporal Correlation	Lian Duan*, Xinyan Zhu, Wenwen Tian, Tao Hu, Liuyuan Chen
13:45-14:00	Catalogue System Integration of China EO Data for CWIC system	Lei Feng*, Chaoliang Wang, Chuanrong Li, Zhen Deng
14:00-14:15	A Web Services Based Integrative Platform for Marine Information in South China Sea	Yawen He*, Fenzhen Su, Yunyan Du
14:15-14:30	Geospatial Web Portal for the Tibetan Plateau Ecological Safety Data Services	Aike Kan*, Xubeng Wang, Xu Wu
14:30-14:45	Web GIS-Based Information Portal System for Road Maintenance	Satoshi Kubota*, Takahira Sugawara, Takahiro Kosawada, Akihiro Abe
14:45-15:00	A Scoring Model for Evaluating Geospatial Web Services - A Case Study of OGC Web Map Service	Lizhi Miao*, Xianglong Shi, Shusheng Cao
15:00-15:15	A Spatial Web Service Client Based on Microsoft Bing Maps	Xin Qu*, Min Sun, Chen Xu, Jing Li, Kai Liu, Jizhe Xia, Qunying Huang, Chaowei Yang, Myra Bambacus, Yan Xu, Dan Fay
15:15-15:30	MGSCP: A Scalable Service Migration Framework for Spatial Information Grid	Lin Wan*, Zhong Xie, Liang Wu, Shenghui Huang, Ran Li

## **OS62[Room G]: GIS and Hydrology**

### **Co-Chairs: Shaowen Wang & Dapeng Zheng**

15:45-16:00	Porous Groundwater Optimal Pumping Based on GIS	Jian An*, Suozhong Chen, Li DouSuoyun XiaoLei Shi
16:00-16:15	Estimation of Evapotranspiration in Yellow River Delta Wetland Based on Two-Source Energy Balance (TSEB) Model	He Li*, Hong Wang, Ling Li
16:15-16:30	Application of Three-dimensional GIS to Water Resources	Rong Li*, Tao Sun, Guo Li
16:30-16:45	Development and Application of a GIS Based Watershed and Receiving Water Modeling System for Support Management of Nonpoint Sources for Virginia Coastal Watershed	Jian Shen*
16:45-17:00	Research and Realization of the Groundwater Analyze Module Based on MapGIS	Jiajia Wang*, Kunlong Yin, Jian Chen
17:00-17:15	Possible Environmental Impact of the Three Gorges Project on Oncomelania Growth in Chongqing	Xuemei Yang*, Zhijun Chen, Xinjie Deng

## **OS63[Room H]: Spatial Database and Cartography**

### **Co-Chairs: Xiaobai Yao & Yao Zhou**

13:30-13:45	The Service System of Urban Parking Guidance Based on GIS in Lianyungang, China	Chang-e Dou*, Fang Wang, Xiangyang Sun, Danfeng Cheng
13:45-14:00	The Logistics Management System Based on GIS	Weihua Kong*, Ran Wang, Zhenmin Shao
14:00-14:15	The Application of Least Squares Collocation in the Error Processing of Vector Map Scanning	Xifeng Li*
14:15-14:30	Hybrid Data Model Based on Map Publishing and GIS	Xingui Liu*, Qun Sun, Xiaoqing Ma, Haiyan Liu
14:30-14:45	The Research of Frame and System in Multiuse Multiscale Thematic Map Designing Knowledge Base	Jun Ma*, Guangxia Wang, Xiaojun Zhou, Zhi-wei Xue, Chengwu Li
14:45-15:00	The Auto-adjustment of Electronic Map Color Based on the Provincial Area Mode of China	Yao Zhou*, Jing'ai Wang, Si Chen, Xingming Zhang

## **OS64[Room H]: Spatial Reasoning and Public GIS**

### **Co-Chairs: Xiaobai Yao & Zhengwei Zhu**

15:30-15:45	Locaiton of Public Service Facilities Based on Inversion Calculation of Floor Area Ratio	Jieping Chen*, Xianjuan Kong, Gongli Li, Yufei Li
15:45-16:00	The Applications of Neighborhood Transopoly in Public Participation Decision Making	Ran Chen*
16:00-16:15	Land Price and Influencing Factors in Tsingtao	Jie Han*, Fahui Wang, Huili Gong, Xiaojuan Li, Ying Cai
16:15-16:30	Issues of Spatial Effect in Technological Progress and Energy Efficiency in China--An Empirical Study Based on Spatial	Lei Jiang*, Minhe Ji
16:30-16:45	Design Coordination Regarding Urban Design Guideline Using Google Earth	Zhenjiang Shen, Zhenhan Lei*, Kenichi Sugihara, Yan Ma, Mitsuhiro Kawakami
16:45-17:00	Location of Public Service Facilities Based on GIS	Lixia Liu*, Xianjuan Kong, Gongli Li, Yufei Li, Lubo Gao
17:00-17:15	Geological Data Access Security Mechanism Based on Grid-GIS	Chunxia Wu*, Chaoling Li, Xia Lv, Jianqiang Li
17:15-17:30	Design and Implementation of the Geospatial Early Warning System of the Insect Pest Based on SOA	Zhengwei Zhu*, Shanqin Wang, Jiaying Chen, Hongyu Zhang, Wenfeng Dun



**PS07[Lobby]: Poster Session (7) (13:30-15:30)**

Analysis of the Impact of Urbanization on Regional Flood Risk: A Case Study in the Qinhuai River Basin, China	Yi Shi*, Youpeng Xu, Juan Cai
Image Fusion Based on Modulation Method with Resolution Degradation and Interpolation	Wanshou Jiang, Yuan Yan*, Feng Zhang, Huixian Wang
Locality Preserving Projections Algorithm for Hyperspectral Image Dimensionality Reduction	Zhiyong Wang*, Binbin He
The Use of Spatial Autocorrelation to Analyze Changes in Spatial Distribution Patterns of Population Density in Jiangsu Province, China	Mengmeng Yang, Jingsong Ma*, Peihong Jia, Yingxia Pu, Gang Chen
An Open Source Spatial Information Software-based Technical Framework for Metallogenic Prediction	Xiaolu Ji*, Bin Chen, Yu Fang, Zhengwei Sui, Zhou Huang
An Index Model of Global Subdivision in Cloud Computing Environment	An Jin*, Chengqi Cheng, Fuhu Ren, Shuhua Song
An Improved Algorithm for Computing Viewsheds Based on Reference Planes	Ye Zhi*, Lun Wu, Heng Cai
An Algorithm for Shortest Raster Distance in Euclidean Space with Obstacles	Zhude Shao*, Qing Ma, Xinyang Liu, Jingsong Ma
Adjust Educational System and Teaching Contents to Cultivate Practical GIS Professional	Guifang Yang*, Yaguang Xu, Yongna Cao, Shengguang Zhuo
A Visualization Framework for Cloud Rendering in Global 3D GIS	Zhengwei Sui*, Xiaolu Ji, Lun Wu, Heng Cai, Zhiyuan Qiao, Xuzhao Zhang
A Study of Finding Relationships between Reservoir Properties and Oil Productivity for the Cold Production	Yongxiang Cai*, Xin Wang, Kezhen Hu, Fei Wang
A Study on Green Vegetation Cover Fraction Based on HJ-1 CCD Image	Shuai Liu*, Qi Li
Construction Place-name Ontology of Beijing Based on Spatial Recognition	Huamin Dang*, Jing Zhang, Dapeng Zhang, Tun Wang
Dynamic Monitoring of Vegetation Coverage in the Three-North Shelter Forest Program by the Analysis of Multiyear NDVI Data	Qiang Wang*, Bo Zhang, Shengpei Dai, Lingxia Guo
Design and Implementation of Spatial Database System for Seasonal Influenza	Yuhuan Ren*, Zhumei Liu, Leiqiu Hu, Yalan Liu
Multisource Spatial Linear Entity Matching Algorithm Based on Multisteps Buffer Analysis	Li Guo*, Hongwei Li, Haiying Zheng, Haiyuan Liu
Evaluation of Spatial Accessibility to Town and Rural in a GIS Environment: a Case Study of Dachang County	Kun Mao*, Manchun Li, Chong Chen, Wei Hu, Dong Chen
The Optimization of FFT Algorithm in GPS Software Receiver	Xiangzhen Yao*, Xinxian Qin, Shaolong Cui, Jinyun Fang

**PS08[Lobby]: Poster Session (8) (15:30-17:30)**

A Spatial Data Partition Algorithm Based on the Statistical Cluster Method	Jiuyan Ye*, Liang Wu, Jian Chen, Yu Fang, Bin Chen
A Rapid Visualization Method of Vector Data over 3D Terrain	Zhiyuan Qiao*, Jingnong Weng, Zhengwei Sui, Heng Cai, Xuzhao Zhang
A New Edge Detection for Multispectral Images	Genyun Sun*, Qinhuo Liu
3D Visual Simulation Research on LEO Satellite Based on PANDA	Jian Tang*, Jing Guo
3D Model Construction of Virtual Campus	Qiuxiang Wang*, Yang Yang, Lu Wang, Changwei Wang, Lang Luo
The Geographical Weighted K-NN Classifiers in Land Cover Classification From Remote Sensing Image: A Case Study of a Subregion of Xi'an, China	Zhibin Jin*, Yingxia Pu, Jingsong Ma, Gang Chen
Research on the Videogrammetric Measurement for the Shaking Table Structure	Xianglei Liu*, Xiaohua Tong
Indoor Evacuation Routes Planning with a Grid Graph-based Model	Jing Sun*, Xiang Li
Analyzing Spatio-Temporal Distribution of Crime Hot-spots and Their Related Factors in Shanghai, China	Zhanhong Wang, Jianping Wu, Bailang Yu*
An Application of Spatial Decision Tree for Classification of Air Pollution Index	Minyue Zhao*, Xiang Li
A Novel Approach to Extracting Street Lamps from Vehicle-borne Laser Data	Yujie Hu*, Xiang Li, Jun Xie, Lei Guo
GIS-based Geological Hazard Assessment and Construction of Scenic Sites Selected: A Case Study of YaDing,SiChuan,China	Chengwu Wang*, Yang Yang, Zegen Wang
GIS-based Hydrologic Modeling in the Qinhuai River Basin Associated with Land Use Changes	Hanyi Rui*, Jinkang Du, Dapeng Zheng, Qian Li
Research Prospect of Internet of Things Geography	Qilou Zhou*, Jie Zhang
Application and Research on Flood Risk Assessment Decision Support System in the Lower Yellow River	Yan Li*, Manchun Li
3D Visualization of Electromagnetic Environment	Yanming Chen*, Jiechen Wang, Manchun Li, Jie Liu, Liang Cheng, Kang Yang, Dong Cai
A Pixel Missing Patch Inpainting Method for Remote Sensing Image	Weiliang Fan*, Jing M Chen, Weimin Ju
Information Extraction of Fast-Growing Plantation Based on Remote Sensing	Feifei Sun*, Zengxiang Zhang, Fang Liu, Qingke Wen, Rong Xu
Development of Generic Technology Service Platform for Urban Black-odor River Treatment	Hu Wang*, Wei Liu, Xiaofei An, Jun Wang, Zhenlou Chen
Land Use Scenario Simulation Based on Multi-agent System	Dong Cai*, Manchun Li, Zhenjie Chen, Xiaohui Jiang, Yanming Chen