

The 17th International Conference on Geoinformatics 2009

Preliminary Program

Johnson Center, George Mason University

August 12th-14th, 2009 at Fairfax, VA, USA

Notes: SS: Special Session; GS: General Session; PS: Poster Session

August 12th 08:30am – 12:15pm

Plenary Session		Location: Cinema
Time	Contents	
08:30-09:00	Welcome Speaking	
09:00-09:35	Michael Goodchild	
09:35-10:10	John Townshend	
10:30-11:05	Keynote speaker from NOAA	
11:05-11:40	Keynote speaker from OGC	
11:40-12:15	Keynote speaker from USGS	

August 12th 13:10am – 16:50pm

SS: Student Paper Competition, Chair: Xun Shi		Location: Room A
Time	ID	Title & Authors
13:10-13:30	008	Conversation and Management of Hutong-Historical and Cultural District of Beijing Inner City Supported by GIS Tianhang HUANG, Anrong DAND and Pei Zhang
13:30-13:50	045	Onboard Real-Time Cloud Detection Using Reconfigurable FPGAs for Remote Sensing Na Shan, Tian Yao Zheng and Zhen Song Wang
13:50-14:10	060	GWSC-VMR, A GIS Supported Conceptual Distributed Hydrological Model for Cold and Arid Regions Tianfang Fang, Guizuo Wang and Liliang Ren
14:10-14:30	107	Quantitative Visualizations of Hierarchically Organized Data in a Geographic Context Donovan Parks and Robert Beiko
14:30-14:50	112	Urban forest inventory using open access web mapping services and photogrammetric solution Mary Thornhill, Amr Abd-Elrahman and Michael Andreu
Coffee Break		
15:10-15:30	115	Automatic Farmland Extraction From Multi-temporal Landsat TM Data Based On Artificial Neural Network Mu Bai, Huiping Liu, Wenli Huang, Yu Qiao and Xiaodong Mu
15:30-15:50	293	A Case Study of Developing Personalized Spatial Cognitive Road Network and Raster Capable Route Finding Algorithm for Pedestrian Evacuation Behavior Simulation Lei Wu and Hui Lin
15:50-16:10	373	ASAR PSI technique applications to detect ground deformation in Mega-cities in the Pearl River Delta Region in China Qing Zhao
16:10-17:10		CPGIS Annual Awards Committee Meeting
SS01, Chair: Robert Gilmore Pontius Jr		Location: Room B

Time	ID	Title & Authors
13:10-13:30	093	A System for Visualizing Spatiotemporal Urban Datasets Stefan Hertel, Matthias Wagner and Rüdiger Westermann
13:30-13:50	137	An object-based multi-scale analysis method on high-resolution remote sensing image Weiyang Yang, Liangpei Zhang, Hua Liu and Songtao Yu
13:50-14:10	164	Post Accuracy Assessment Soft Classification using virtual globes Rahul Rakshit
14:10-14:30	238	Accuracy assessment of object-oriented classification using virtual globes Robert Gilmore Pontius Jr, Jenner Alpern, Albert Decatur, Nicholas Giner, Rahul Rakshit and Colin Polsky
14:30-14:50	270	An Accelerated Approach to Create 3D Web Cities Lifeng Liu and Jinyun Fang
Coffee Break		
15:10-15:30	276	Using progressive transmission of 3D/4D geospatial information over the Internet to facilitate geo-visualization in World Wind Jing Li, Huayi Wu, Chaowei Yang, Jibo Xie, Zhenlong Li and Qunying Huang
15:30-15:50	277	Vector Distance Algorithm for Optimal Segmentation Scale Selection of Object-oriented Remote Sensing Imagery Classification Huan Yu, Shuqing Zhang and Bo Kong
15:50-16:10	316	Sensitivity of a land change model to pixel resolution and precision of the independent variable Hao Chen and Robert Pontius
16:10-16:30	319	Object-Base High Resolution Land Cover Mapping: Operational Considerations Jarlath O'Neil-Dunne, Sean MacFaden, Keith Pelletier, Morgan Grove and Austin Troy
16:30-16:50	417	Using virtual world technology to construct immersive 3D virtual university Bin Chen, Fengru Huang and Hui Lin
SS02, Chair: Yu Liu, Jing Zhang		Location: Room C
Time	ID	Title & Authors
13:10-13:30	016	An Intelligent Bay Geo-Information Retrieval Approach based on Geo-ontology Rulin Xiao, Yunyan Du, Wei Liu and Yawen He
13:30-13:50	021	KIDGS: A Geographical Knowledge-informed Digital Gazetteer Service Yu Liu, Runqiang Li, Kaichen Chen, Yihong Yuan, Lingli Huang and Hao Yu
13:50-14:10	022	On Geo-social Network Services Qian Huang and Yu Liu
14:10-14:30	135	Discovery of Spatial Links between Individuals on the Geospatial Semantic Web Alina-Dia MIRON, Jérôme Gensel and Marlene Villanova-Oliver
14:30-14:50	312	A Semantic-Enabled Meta-Catalogue for Intelligent Geospatial Information Discovery Wenwen LI, Chaowei Yang and Rob Raskin
Coffee Break		
15:10-15:30	159	Integrating Semantic World Modelling, 3D-Simulation, Virtual Reality and Remote Sensing Juergen Rossmann, Michael Schluse, Ralf Waspe and Martin Hoppen
15:30-15:50	180	Semantic Relation Representation of geographic concept based on lattice Hong Wang, Lin Li and Ping-chao Song
15:50-16:10	243	Beijing-based urban public transport travel distance cognitive research Liu Bao, Zhang Jing, Du Chong and Jiang Jiefeng
16:10-16:30	259	Extracting the international markets of a tourist attraction from inlinks Yi Zhang, Lina Qi, Yu Liu, Lili Song and Yong Gao
16:30-16:50	444	The Analysis of the Ring Road Impact Factor on Route Choose Xiaohui Hou, Jing Zhang, Chong Du and Lianjun Zhang
SS03, Chair: Zhengwei Yang, Rick Mueller, Ying Ke		Location: Room D
Time	ID	Title & Authors
13:10-13:30	010	Maps and Models for Predicting and Preventing Global Food and Water Crisis Prasad Thenkabail, Alexander Platonov and Chandrashekhar Biradar
13:30-13:50	031	Spatial Variability of Micro-elements in Agricultural Soil of Chongming, Shanghai Guangrong Shen and Guangrong Shen

13:50-14:10	063	Comparison of Sub-pixel Classification Approaches for Crop-specific Mapping Yang Shao and Ross Lunetta
14:10-14:30	165	Crop phenology date estimation based on NDVI derived from the reconstructed MODIS daily surface reflectance data Hu Zhao, Zhengwei Yang, Liping Di, Lin Li and HaiHong Zhu.
14:30-14:50	222	Data partnership synergy: the cropland data layer Rick Mueller and Claire Boryan.
Coffee Break		
15:10-15:30	245	Building Geospatial Web Portal for Use of National Agricultural Statistics in Geographic Context Peisheng Zhao, Liping Di, Weiguo Han and Zhengwei Yang
15:30-15:50	366	A Study of Modis and Awifs Multi-sensor Fusion for Crop Classification Enhancement Zhengwei Yang, Yanglong Ling and Claire Boryan
15:50-16:10	379	GIS Application for Supporting Agricultural Disaster Loss Assessment Ying Ke and Ted Payne
16:10-16:30	242	Habitat-GIS-based models for ground beetles (Coleoptera: Carabidae) distribution in agricultural landscape Changliu Wang, Yunhui Liu and Jan C. Axmacher
16:30-16:50	384	Modeling Research on the Development of Agriculture, Forestry and Distinctive Resources in Changbai Mountain Area Zhang Xia, Yang Lingbin, Zou Bin and Wu Jin
GS01, Chair: Zhong Liu		Location: Room E
Time	ID	Title & Authors
13:10-13:30	272	Providing Global Precipitation Data Information through Google Earth Zhong Liu, Gregory Leptoukh and Aijun Chen
13:30-13:50	436	Three Dimensional Peer-2-Peer (3DP2P) Networks Clayton Thomas, Damian Watkins and Craig Scott
13:50-14:10	001	Visualization of vertical profiles from campaign mission on Google Earth Aijun Chen, Gregory Leptoukh, Steven Kempler, Christopher Lynnes and Yuqi Bai
14:10-14:30	254	Fast and Semi-automatic 3D Modeling and Roaming of Large-scale Terrain Yuanzheng Shao, Liping Di, Bingxuan Guo and Jing Cao
14:30-14:50	260	Extracting the international markets of a tourist attraction from inlinks Zhichao Zhang, Deren Li, Yixuan Zhu and Pingxiang Li
Coffee Break		
15:10-15:30	079	Analysis Spectral Features of Water Quality in Baiyangdian Wetland, China Lin Zhu, Huili Gong, Wenji Zhao, Xiaojuan Li, Feina Lin, Bo Zhou, Yanfang Xiao and Jing Zhang
15:30-15:50	113	The Research of Shared Platform of Water Environment Information Service based on GEOGLOBE Cao Haitao, Gong Jianya and Chen Xiaoling
15:50-16:10	176	A Real-time Calculating Method of Channel Reservoir Backwater Storage Yunfeng Lu, Debao Tan, Xiaoling Chen and Hui Li
16:10-16:30	361	Spatial Uncertainty Analysis for Water Distribution under Fragility Curves Ming-Ko Chung and Che-Hao Chang
16:30-16:50	402	Web Decision Support and Visualization Tools for Water Quality Management in the Chesapeake Bay Watershed Cassandra Mullinix, Huajun Zhang, John Aguinaldo and Paul Hearn
GS02, Chair: Meixia Deng, Nouhad Amaneddine		Location: Room F
Time	ID	Title & Authors
13:10-13:30	036	Reconciling inconsistent perspectives in collaborative GIS using multi-agent method Eric Zheng Chang and Songnian Li
13:30-13:50	223	Proactive delivery strategy of spatial information Yu Xia, Xinyan Zhu and Deren Li
13:50-14:10	309	Computational Cyber-Laboratory for Earth Science Studies Meixia Deng and Liping Di

14:10-14:30	310	Data Cleaning approaches in Web2.0 VGI Application Xinlin Qian, Deren Li, Liping Di, Pingxiang Li, Lite Shi and Liefei Cai
14:30-14:50	317	The Analysis of Economy Spatial Characteristics of Beijing-Tianjin-Hebei Metropolitan Region Based on GIS Jian Lian, Huili Gong, Xiaojuan Li, Yonghua Sun, Wenhui Zhao, Lin Zhu and Jing Zhang
Coffee Break		
15:10-15:30	338	The Evolution of Administrative Division in Beijing and the Analysis on its Spatial Pattern Based on GIS Yongfu Li, Anrong Dang and Tianhang Huang
15:30-15:50	355	A Study on Temperature Interpolation Methods Based on GIS Wenjing Cao, Jinxing Hu and Xiaomin Yu
15:50-16:10	403	Modeling Real-Estate search service using GIS technology Nouhad Amaneddine and Nader Chmeit
16:10-16:30	408	Changes in landscape pattern of wetlands in the Pearl Rivers estuary in the past two decades Lang Xu, Xiaoxiang Chen, Xiaolan Li and Zhijian He
16:30-16:50	410	Spatio-temporal data model based on dynamic correlation Shengxiao Wang, Shaoyu Shi, Biao Liu and Kai Cao

August 13th 08:30am –12:10pm

SS04, Chair: Jessica Lin, Peggy Agouris		Location: Room A
Time	ID	Title & Authors
08:30-08:50	026	Query and Visualization of extremely large datasets over the Web using Quadtree based KML Regional Network Links Upendra Dadi, Cheng Liu and Ranga Raju Vatsavai
08:50-09:10	027	Trajectory Clustering by Multi-resolution Mesh-Grids and Concatenation Upendra Dadi and Liping Di
09:10-09:30	101	A Novel Feature Ranking Modelling in GIS Context: Addressing Complexity and Cost Issues Alberto Gemelli, Claudia Diamantini and Domenico Potena
09:30-09:50	102	Very High Spatial Resolution Images: Segmenting, Modeling and Knowledge Discovery Erick López-Ornelas
09:50-10:10	158	Spatial interpolation via GWR, a plausible alternative? Danlin Yu
Coffee Break		
10:30-10:50	191	VegaMinerPOI: A Spatial Data Mining System for POI Datasets Peng Sun, JinYun Fang, ChengDe Han and Zhenlin Cheng
10:50-11:10	237	Detecting Spatio-Temporal Outliers with Kernels and Statistical Testing James Rogers, Daniel Barbara and Carlotta Domeniconi
11:10-11:30	351	Analysis with Linear Referencing Kevin Curtin
11:30-11:50	367	Sea Surface Temperature: Hurricanes Gustav, Hanna, and Ike, August – September 2008 Sinclair Sheers
11:50-12:10	372	Determining and Mapping Thermokarst Using Remote Sensing Katarina Doctor
SS05, Chair: Shawn Newsam		Location: Room B
Time	ID	Title & Authors
08:30-08:50	065	Mapping Surface Cover Using EO-1 Hyperion Data: Ongoing Studies in Arid Environments David Leverington.
08:50-09:10	086	A Structured Sub-pixel Detector Based on Dynamic Endmembers Du Bo, Zhang Liangpei, Li Pingxiang and Zhong Yanfei
09:10-09:30	247	Feature shape and elevation based road classification and extraction on high spatial resolution remote sensing imageries Tao Tang, Xiao Wang, Zhixin Shi and Joaquin Carbonara
09:30-09:50	183	Application of High Resolution RS Images in Land-use Intensity Extraction Chen Zeng, Yanfang Liu, Zeying Lan and Xing Li
09:50-10:10	025	Research on Road Centerline Extraction from Aerial Image Based on Sorting BingXuan Guo, Qi Li and YuanZheng Shao
Coffee Break		
SS06, Chair: Debao Tan		Location: Room B
10:30-10:50	018	Estimation and analysis of land surface water and heat fluxes in mountain-plain area based on remote sensing and DEM Yang Hequn, Liu Yong, Yang Yinming and Zhang Cong
10:50-11:10	118	Simulation on the effects of non-point source pollution in Qingjiang River Basin based on SWAT model and GIS Zhaohui Wang, Dengzhong Zhao, Bo Cao and Qingyun Du.
11:10-11:30	156	The Digital Irrigation System Information Management and Water Use Decision Support System Sui Zhang, Debao Tan and Yuanlai Cui
11:30-11:50	194	Impact analysis and appraisal of Tangjiashan Barrier Lake by spatial information technology Yu Zhang and Pengxiao Chen
11:50-12:10	299	Application of SWAT for sediment yield estimation in a mountainous agricultural basin Zheng Duan, Xianfeng Song and Junzhi Liu

SS07, Chair: Guoqing Li, Carol X. Song		Location: Room C
Time	ID	Title & Authors
08:30-08:50	057	The Spatial Analysis Service Based on the Spatial Information Grid Yunxuan Yan, Guoqing Li, Yi Zeng and Jibo Xie
08:50-09:10	092	The Framework and Realization of Grid Node Computing Pool of China Geological Spatial Information Grid Zhong Xie, Ming-Qiang Guo, Liang Wu and Ying Huang
09:10-09:30	097	One rasterization approach algorithm for high performance map overlay Hui Dong, Zhenlin Cheng and Jinyun Fang
09:30-09:50	131	Spatial Data Access Control in Grid Environment Menglong Yan, Yong Gao, Lun Wu, Yixian Sun, Pengfei Wu and Yong Zhao
09:50-10:10	283	The Parallelism Optimization and Performance Evaluation of a Novel Dense Image Matching Algorithm Xin Huo, Zhengze Qiu, Fa Zhang, Weichao Lu and Zhaowei Kang
Coffee Break		
10:30-10:50	396	Improvement and Experiment on Grid-oriented Map Display Service Lixia Guo, Guoqing Li, Wenyang Yu and Jibo Xie
10:50-11:10	414	The Design, Development and Application of Geographical Knowledge Service Grid Portal Xiaozhu Wu and Chongcheng Chen
11:10-11:30	416	Urban land suitability evaluation based on BP network Yan Wang, Junru Cao, Peilin Wu and Zhenbai Song
11:30-11:50	419	Parallel Map Rendering System for Massive Geospatial Data in Distributed Environment Yingchao Ren, Lin Zhu, Chongjun Yang and Lei Shen
11:50-12:10	435	Geospatial Data Grid with Computational Capability Hao Chen, David Goodenough, Aimin Guan, Randall Sobie, Ashok Agarwal, Belaid Moa, Ian Gable, Patrick Armstrong, Ronald Desmarais, Andre Charbonneau, Roger Impey and Wayne Podaima
SS08, Chair: John Qu, Shengjie Niu		Location: Room D
Time	ID	Title & Authors
08:30-08:50	230	Microphysical Properties of Dense Fogs in the Winter of Nanjing Based on Remote Sensing Shengjie Niu, Dan Xu, Chunsong Lu and Lijuan Zhao (invited talk)
08:50-09:10	190	Remote Sensing and Geographic Information System Techniques for Groundwater Exploration in Arid and Semi-arid Land Kamel Sheikho
09:10-09:30	221	Analysis of Hurricane Impacts on Forest Combining Modeling with Remote Sensing Measurements Wanting Wang, John Qu, Xianjun Hao and Yongqiang Liu.
09:30-09:50	421	Remote sensing for monitoring on the health of artificial Robinia Pseudoacacia Forests in the Yellow River Delta Ling Yao, Qingsheng Liu, Gaohuan Liu, Lifan Fei and Sheng Gui.
09:50-10:10	381	Inter-Sensor Comparison between Terra and Aqua MODIS over Ocean sites and an initial life-time assessment of uncertainty in AOT due to radiometric calibration Sriharsha Madhavan, John Qu and Xiaoxiong (Jack) Xiong.
Coffee Break		
10:30-10:50	078	Remote Sensing Drought Monitoring Under Dense Vegetation Cover Condition Based on Perpendicular Drought Index Zhe Li, Debao Tan, Yuanlai Cui and Sui Zhang
10:50-11:10	382	Asian dust storm detection using MODIS and CALIPSO Yong Xie and John Qu
11:10-11:30	375	Observational Study on Optical Properties of Dust Aerosol from a Semi-Arid Site in North China during 2002-2007 Dan Xu and Shengjie Niu.
11:30-11:50	387	Estimating forest aboveground biomass over regional scales using Landsat 5 TM data Min Li, John J. Qu and Xianjun Hao
11:50-12:10	449	Intercomparison of candidate methods for mineral dust aerosol classification using MODIS

		infrared and visible channels Aleta Duval and Rahul Ramachandran
GS03, Chair: Helena Mitasova, Huili Gong		Location: Room E
Time	ID	Title & Authors
08:30-08:50	037	Modifying MOD16 algorithm for improving evapotranspiration estimation using MODIS data Wen Wang
08:50-09:10	042	Development of integrated typhoon remote sensing application system based on .NET and ArcGIS Engine Yang Hequn, Yang Yinming and Zhang Shengmao
09:10-09:30	062	Riverbank Erosion, Sandbank deposition and Migration of River Channel: A Study of the Padma and the Jamuna Rivers in Bangladesh Using RS and GIS Md. Tariqul Islam
09:30-09:50	081	Analysis of ground deformations based on parallel geostatistical computations of PSInSAR data Jacek Strzelczyk, Stanisława Porzycka and Andrzej Leśniak
09:50-10:10	099	Inversion Modeling of Chlorophyll-a Concentration in Water by Multi-Angle Polarized Reflection Yang Han, Yeqiao Wang, Yunsheng Zhao and Yunfeng Lu
Coffee Break		
10:30-10:50	117	A Pre-evaluation on the Effects of Mining on the Ecosystems Integrating Remote Sensing and Hydrological Model in Florida Jing Zhang, Mark Ross, Huili Gong and Xiaojuan Li
10:50-11:10	124	New measures of terrain dynamics derived from time series of lidar data Helena Mitasova, Eric Hardin, Russell Harmon and Margery Overton
11:10-11:30	127	Temporal and Spatial Variation of Urban Airborne Inhalable Particle and It's Influence Factor Analysis using GIS & RS Wen-hui Zhao, Hui-li Gong, Wen-ji Zhao, Tao Tang, Lin Zhu and Jian Lian
11:30-11:50	152	Identification of Sand dredges in Yangtze River Based on ASAR Remote Sensing Data Xuejun Cheng, Youchuan Wan and Bo Cao
11:50-12:10	198	Examining Effects of Past Volcanic Eruptions on Forests of the Changbai Mountain with in situ and Remote Sensing Observations Jiawei Xu, Yu Liang and Yeqiao Wang
GS04, Chair: Guido Cervone, Yeqiao Wang		Location: Room F
Time	ID	Title & Authors
08:30-08:50	200	Integration of Remote Sensing and in situ Observations for Inventory and Monitoring of Regional Ecological Security of the Changbai Mountains Yeqiao Wang, Zhengfang Wu, Jiang Feng, Xing Yuan, Hongyan Zhang, Jiquan Zhang and Jiawei Xu
08:50-09:10	209	Combining remote sensing data and an inundation model to map tidal mudflat regions and improve flood predictions: A proof of concept demonstration in Cook Inlet, Alaska Hua Liu and Tal Ezer
09:10-09:30	423	VORONOI Diagram and GIS -based 3D Path Planning Lifeng Liu and Shuqing Zhang
09:30-09:50	335	Spatial and Temporal analysis of Cultivated Land in Guangdong Province during 1996-2006 Xiaodong Wang, Huiping Liu, Shoudong Zhu, Xiaoluo Zhou and Yu Qiao
09:50-10:10	378	Determining Coral Reef Health by using Sea Surface Temperature Variance Chad Blevins and Guido Cervone
Coffee Break		
10:30-10:50	015	Map match and conflation based on probabilistic method Sheng Ying, Lin Li and Yurong Gao
10:50-11:10	044	Wavelet Texture Extraction and Image Classification of Hyperspectral Data Based on Support Vector Machines Jin-Tsong Hwang
11:10-11:30	066	The Neural Network Classification of Remotely Sensed Imagery Using Neighborhood Characteristic Mu Bai, Huiping Liu, Wenli Huang and Xiaodong Mu
11:30-11:50	080	A New R-tree Node Splitting Algorithm Using MBR Partition Policy

		Yan Liu, Jinyun Fang and Chengde Han
11:50-12:10	452	Space - Time Spread of Sexually Transmitted Diseases (STDs) in 2 States: A Preliminary Analysis Michelle Kloc, Naoru Koizumi, Amit Patel and Arnauld Nicogossian

August 13th 13:10am – 16:50pm

SS09, Chair: Tien-Yin Chou		Location: Room A
Time	ID	Title & Authors
13:10-13:30	039	Using Mobile Sensors for In-situ Monitoring of Debris Flows in Taiwan Hsiu-Yi Ko, Yao-Min Fang, Ying-Hui Chang and Tian-Ying Chou
13:30-13:50	049	Using Neural Network Classifier and the GIS technique for Automatic Landslide Hazard Assessment Wen-Tzu Lin and Pi-Hui Huang
13:50-14:10	075	Development of Dynamical Monitoring and Alert System for Bridge safety with OGC-SWE framework Ming-Chang Tsai, Yao-Min Fang and Tien-Yin Chou
14:10-14:30	091	Landslide caused by typhoon-induced disaster: A case study on Shihmen watershed Wen-Chieh Chou
14:30-14:50	202	Implementation of a Pilot GIS for a Volunteer-Based Water Quality Monitoring Program Timothy Love, Chris Trumbauer and Charles Cole
Coffee Break		
15:10-15:30	298	Sensor-based Roadway Infrastructure Damage Assessment for Accelerating Disaster Recovery Yichang James Tsai Tsai.
15:30-15:50	349	A study of Real-Time Identification and Monitoring of Barge-Carried Hazardous Commodities Yangrong Ling, Mingzhou Jin, Michael Hilliard and John Usher
15:50-16:10	390	Spatial data assistant and its technical implementation for the emergency response to natural disaster Guoqing Li, WenYang Yu and Xv Zhou
16:10-16:30	448	An Evaluation of Potential Natural Disaster Response Using the National Polar-orbiting Operational Environmental Satellite System (NPOESS) Mark Bowman
16:30-16:50	459	Application of GPS/GIS Technologies in the Pre-hospital First Aid: Case study of Suzhou City Yulong Bai
SS10, Chair: Peisheng Zhao		Location: Room B
Time	ID	Title & Authors
13:10-13:30	023	Geospatial workflow models for adaptive controlled validity and accuracy Didier Leibovici, Gobe Hobona, Kristin Stock and Mike Jackson.
13:30-13:50	027	Creating Web Service Interfaces and Scientific Workflows Using Command Line Tools: A GRASS example Upendra Dadi and Liping Di
13:50-14:10	154	Workflow-Oriented the Optimal Path Web Services in Multi-Level Road Network Yumin Chen and Jianya Gong
14:10-14:30	395	Delegation in Geoprocessing Workflows Bastian Schäffer
14:30-14:50	376	A Model Driven Framework for Geographic Knowledge Discovery Octavio Glorio, Jose Zubcoff and Juan Trujillo
Coffee Break		
15:10-15:30	174	Integration of Geospatial Web Services and Web Portal Technologies for Geospatial Information Sharing and Processing Jie Yuan, Peng Yue and Jianya Gong
15:30-15:50	297	Multi-level Semantic Matching of Geospatial Web Services An Luo, Yandong Wang, Lanfang Wang and You He
15:50-16:10	313	A Global planning of geo-processing workflow in a distributed and collaborative environment

		Xianfeng Song, Chuanrong LI and Lingli Tang
16:10-16:30	405	Towards a Semantic-Based Automatic Orchestration of Geo-Processing Services Michael Owonibi and Peter Baumann
16:30-16:50	406	Increasing Process Reliability in a Geospatial Web Services Composition Sergio A. B. Cruz, Antonio M. V. Monteiro and Rafael Santos
SS11, Chair: Xuan Shi, Lan-Kun Chung		Location: Room C
Time	ID	Title & Authors
13:10-13:30	094	SOA-Based platform for water resource information exchanging Cheng-Te Yang, Geui-Lin Huang, Fu-Hsun Huang, Ting-Wu Ho, Pi-Hui Huang and Jiann-Min Yang
13:30-13:50	095	The Invasive Species Forecasting System: A Workflow-Oriented Decision Support Framework for Managing Biological Invasions John Schnase, Neal Most, Roger Gill and Peter Ma
13:50-14:10	105	Towards Building a Geo-Service Broker Kealeboga Kaizer Moreri, Xiaolun Yi and Darka Mioc
14:10-14:30	108	A SOA based debris flow monitoring system - Architecture and proof-of-concept implementation Lan-Kun Chung, Bastian Baranski, Yao-Min Fang, Yin-Huei Chang, Tien-Yin Chou and Bing Jean Lee
14:30-14:50	244	Using AJAX for Desktop-like Geospatial Web Application Development Weiguo Han, Liping Di and Peisheng Zhao
Coffee Break		
SS12, Chair: George Percivall		Location: Room C
15:10-15:30	168	OGC WPS Implementation of Data Pre-processing, Integration Service in SEPS Xinlin Qian, Liping Di and Genong Yu
15:30-15:50	170	Discover, Visualize, and Deliver Geospatial Data through OGC Standards-based WebGIS System Yaxing Wei, Suresh-Kumar Santhana-Vannan and Robert Cook
15:50-16:10	385	OGC Web Map Service Implementation Challenges for Mobile Computers Clodoveu Davis, Fatima Figueiredo and Yuri Kimo.
16:10-16:30	207	Sensor Web Service Integration for Pandemic Disease Spread Simulation Genong Yu, Liping Di, James Smith, Bei Zhang, Hulin Wang and Min Min
16:30-16:50	188	Semantic Discovery of OGC WPS-based Remote Sensing Image Processing Xu Chen and Xinyan Zhu.
GS05, Chair: Genong Yu, Fang Qiu		Location: Room D
Time	ID	Title & Authors
13:10-13:30	150	A Quality Evaluation Method for Geographic Information Services based on the Method of Fuzzy Comprehensive Evaluation Shengyu Shen, Wei Liu, Yumin Chen and Huayi Wu
13:30-13:50	454	Real-time Traffic Data Management for Dynamic Vehicle Navigation System Yang Yu and Bin Li
13:50-14:10	205	Geospatial Cloud Computing: concept and use cases Genong Yu and Liping Di
14:10-14:30	206	Severe Weather Event Detection and Tracking Sensor Web Genong Yu, Liping Di, John Moses and Peichuan Li
14:30-14:50	456	Design and Implementation of a Location Awareness System for Field Police Work Duansheng Chen
Coffee Break		
15:10-15:30	218	Implementation of a Prototype System for Data and Sensor Planning Service Bei Zhang, Liping Di, Genong Yu and Huilin Wang
15:30-15:50	228	Implementation of Sensor Observation Service for Satellite Imagery Sensors Huilin Wang, Liping Di, Genong Yu and Bei Zhang
15:50-16:10	257	Web Service for Extracting Terrain Openness from DEM Data Wei Luo, Xiaoyan Li, Tomasz Stepinski and Liping Di
16:10-16:30	325	Sharing Geospatial Processing Algorithms Developed with Open Source GIS Tools through a Web Processing Service

		Xiaoyan Li, Liping Di, Peisheng Zhao, Upendra Dadi and Weiguo Han
16:30-16:50	413	Revitalizing GRASS using service oriented architecture Fang Qiu, Haiting Huang, Bryan Chastain, Yaochen Qin, Shuang Li and Liping Di
GS06, Chair: Kazutoshi Sumiya, Lizhi Miao		Location: Room E
Time	ID	Title & Authors
13:10-13:30	103	Integration of geospatial information for mobile and services devices Erick Lopez-Ornelas and Fernando Farfán-Olvera
13:30-13:50	211	WASP: An Innovative Sensor Observation Service with Web-/GIS-based Architecture Jen-Chu Liu and Kuo-Yu Chuang
13:50-14:10	248	A mobile hot-spot navigator for instant POI finding in an unfamiliar area - A case study of restaurants finding in Da-an District, Taipei city, Taiwan Wei Shen Lai and Chia-Chun Shih
14:10-14:30	374	Shortest Path Queries in Mobile Broadcast Environments Ta-Chih Su, Yun-Tung Hsieh and Chuan-Ming Liu
14:30-14:50	358	Geographical Information Retrieval based on User's Operation on both Digital Maps and Directory Services Rika Kotera, Daisuke Kitayama and Kazutoshi Sumiya
Coffee Break		
15:10-15:30	004	Research on the system of matching and rectifying vector electronic map Zhu Shoudong, Liu Huiping, Wang Xiaodong, Zhou Xiaoluo and Qiao Yu
15:30-15:50	352	Enterprise Spatial Data Deployment Strategies in a Global Engineering Environment – The Bechtel Experience Tracy McLane and Yongmin Yan
15:50-16:10	136	Organization and Schedule of Multi-resolution Pyramid Based on Wavelet Transform Longgang Xiang and Xinyan Zhu
16:10-16:30	106	GML Parsing Technology Service and its Sharing Platform Lizhi Miao
16:30-16:50	433	Quick Computation Program of Fractal Dimension for 2D Vector Data Qian Wang, Quanfang Wang, Xin Mei, Haiwen Zhang and Hangzhou Sun
GS07, Chair: Okan K. Ersoy, Jingyun Fang		Location: Room F
Time	ID	Title & Authors
13:10-13:30	089	Geospatial Data Mining for Pest Management - a Framework Amiya Kumar Tripathy, J. Adinarayana and D. Sudharsan
13:30-13:50	161	A Performance Evaluation on DCT and Wavelet-based Compression Methods for Remote Sensing Images based on Image Content Shayron Nichols, Hyunju Kim, Ali A. Humos and Hyun Jung Cho
13:50-14:10	227	The Comparative Study of Three Methods of Remote Sensing Image change detection Lu Xu, Zongyi He and Shaoqing Zhang
14:10-14:30	301	Towards of The Parallel Triangular Geometric Correction Algorithm of Remote Sensing Image Tongjun Qi, Haojun Liao, Jinyun Fang and Chende Han
14:30-14:50	302	Image Fusion by Compressive Sensing Atul Divekar and Okan Ersoy
Coffee Break		
15:10-15:30	304	Stability maps for really exploitable automatic classification results Emanuele Frontoni, Anna Maria Bernardini, Eva Savina Malinverni, Adriano Mancini and Primo Zingaretti
15:30-15:50	348	A Winner Takes All Mechanism for Automatic Object Extraction from Multi-Source Data Adriano Mancini, Emanuele Frontoni and Primo Zingaretti
15:50-16:10	362	A parallel remote sensing images fusion algorithm based on intensity-hue-saturation and nonsubsampling contourlet transform Tongjun Qi, Haojun Liao, Jinyun Fang and Chende Han
16:10-16:30	430	Extracting the Spatial Features from Satellite Images Using the Multilayer Level Set Method Shen Ying, Lin Li, Wanzeng Liu, Yurong Gao and Hong Wang
16:30-16:50	446	A computer model to study the variability of gridded Sea Surface Temperature (SST) values

	derived from AQUA/AMSRE satellite data and its influence on the onset of South West Monsoon near the Kerala coastal region in India Subhas Chakravarty
--	---

August 14th 08:30am –12:10pm

GS08, Chair: Jianfei Chen, Martin Habermeyer		Location: Room A
Time	ID	Title & Authors
08:30-08:50	007	Effect of spatial scale on regional land-use pattern analysis in different classification system and different data source: An empirical study at Province and County levels of China Bingwen Qiu, Chongcheng Chen and Xiaozhu Wu
08:50-09:10	038	Land Cover Change Detection Based On MODIS 250m Vegetation Index Time Series Data Wen Wang.
09:10-09:30	195	An evaluation on human interpretation error in geographical data: a case study with land use data Yuki Hanashima
09:30-09:50	236	Estimation of Manning's roughness coefficient distribution for hydrodynamic model using remotely sensed land cover features A. K. M. Hossain, Xiaobo Chao and Yafei Jia
09:50-10:10	420	Geostatistical Analysis on Human Impact Indexes for Land Use/Cover in Fujian Province and Fuzhou City Chen Zhiqiang and Chen Jianfei
Coffee Break		
10:30-10:50	425	Changes of Eroded Landscape Pattern Based on Optimum Scale Zhibiao Chen, Aiping Zou, Zhiqiang Chen and Lihui Chen
10:50-11:10	431	New Logic for Large-scale Land Cover Classification Based on Remote Sensing Quanfang Wang, Haiwen Zhang, Hangzhou Sun and Jiayong Li
11:10-11:30	437	Enhancing a GIS Cellular Automata Model of Land Use Change Using Support Vector Machine_PDF Onuwa Okwuashi, Jack McConchie, Peter Nwilo and Etim Ey
11:30-11:50	083	Three-dimensional Spatial Indexing Method of Complicated Geological Scene Zhenwen He, Gang Liu, Zhengping Weng and Chonglong Wu
11:50-12:10	087	W42 - A Scalable Spatial Database System for Holding Digital Elevation Models Martin Habermeyer, Achim Roth and Ursula Marschalk
GS09, Chair: Yuqi Bai, Nigel Waters		Location: Room B
Time	ID	Title & Authors
08:30-08:50	185	Geospatial Data Provenance in Cyberinfrastructure Peng Yue and Lianlian He
08:50-09:10	197	The research of interoperability in spatial catalogue service between CSW and THREDDS Chengfang Hu, Liping Di and Wenli Yang
09:10-09:30	213	OpenGIS Catalog Service Implementations: Lesson Learned Yuqi Bai, Liping Di and Aijun Chen
09:30-09:50	214	Case studies for OpenGIS Catalog Service Wrapper Yuqi Bai, Liping Di and Aijun Chen
09:50-10:10	460	Providing Public Standardized Data Access Function: Lessons Learned from Accessing USGS LANDSAT Archive Xuanang Cheng, Yuqi Bai, Liping Di and Doug Nerbert
Coffee Break		
10:30-10:50	076	Urban Population Travel Modeling based on Data Fusion of Mobile Phone Positioning Data and FCD Jinxing Hu, Wenjing Cao, Jun Luo and Xiaomin Yu
10:50-11:10	098	The impact of healthy food accessibility on childhood obesity Lauren Rosenshein and Nigel Waters
11:10-11:30	295	Using Geographically Weighted Regression to Explore Socioeconomic Indicators and Impervious Surface Across Massachusetts Yelena Ogneva-Himmelberger, Charlyn Pearsall and Rahul Rakshit
11:30-11:50	321	Spatial distribution of litter storage in China Yuandan Ma, Xiuying Zhang, Qian Zhu, Bin Wang, Hong Jiang, Xiaohui Xia and Meiling

		Huang
11:50-12:10	360	Trip Assignment for Journey-after-vehicle-theft in Mesa, Arizona Yongmei Lu, Bruce Taylor and Christopher Koper
GS10, Chair: Andrew Frank, Huiping Liu		Location: Room C
Time	ID	Title & Authors
08:30-08:50	167	Using RS/GIS to Explore the driving forces of Land Use and Land Cover at a Semiarid Headwater Catchment, China Xu Zhang, Xinyan Zhu and Yingwei Yang
08:50-09:10	203	The Alternate Hierarchical Decomposition of Nonconvex Polytopes: Generalization of a Convex Polytope Based Spatial Data Model Rizwan Bulbul and Andrew Frank
09:10-09:30	264	A Study of Points Object Generalization Based on Rough Set Technology Wenjing Li, Hong Wang, Zhiyong Lin and Xiaotong Zhang
09:30-09:50	398	Extending the Map Cube Operator with Multiple Spatial Aggregate Functions and Map Overlay Francisco Moreno
09:50-10:10	441	Validation of Surface Radiation Data Provided by the CERES Over the Tibetan Plateau Sheng Gui, Shunlin Liang and Lin Li
Coffee Break		
10:30-10:50	116	Urban Expansion Simulation based on Constrained Artificial Neural Network Cellular Automata Model Wenli Huang, Huiping Liu and Mu Bai
10:50-11:10	219	Spatial Pattern Analysis in Urban Surface Based on Elevation Corrected Urban Building Entity Models Yang Tao, Guoan Tang, Shanshan Ge, Shijie Zhu, Xiangxi Dai and Rui Zhu
11:10-11:30	271	Urban Expansion and its Effect on City Hot Land Effect of Chuxiong City Over the Past 30 Years in Yunnan, China Yang Yunyuan, Zhengtao Shi, Ping He, Shaoyu Tong and Chengdong Xu
11:30-11:50	401	Applying Space Syntax in Large Polycentric City - Case Study in Wuhan, China Qingming Zhan, Jingnan Zhou and Yinghui Xiao
11:50-12:10	140	The design of intelligent expert classifier for featured crop mapping combining spectral library Hongli Li, Ligang Fang and Shuisen Chen
GS11, Chair: Dirk Cattrysse, Sinclair Sheers		Location: Room D
Time	ID	Title & Authors
08:30-08:50	110	GeoProfiling Zohra Hemani, Ray Renner, George Tjoumas, Kimberly Turley, Craig Callender, Becky Elstad and Paul Smith
08:50-09:10	134	Integer Programming (IP) formulation for minimizing sediment delivery in a watershed by reforestation of optimal sites Pablo Vanegas, Dirk Cattrysse and Jos Van Orshoven
09:10-09:30	179	Road Densities and Species Abundance Yi-Fang Chen and Walter Chen
09:30-09:50	210	Dasymetric Estimation of Census Population Density: A Geostatistical Approach Zongyi He
09:50-10:10	433	Kernel Density Estimation with Geographically Masked Points Xun Shi, Jennifer Alford-Teaster and Tracy Onega
Coffee Break		
10:30-10:50	458	A Segmentation Method of Ultrasonic CT Image Based on Wavelet Neural Network Ying Wu, Mingqing Sun and Zhuoqiu Li
10:50-11:10	447	Finding Cold Wakes of Hurricanes Gustav, Hanna, and Ike (August – September, 2008) and Katrina (August 2005) using three-day composites of Sea Surface Temperature from TRMM's TMI Sinclair Sheers
11:10-11:30	457	Fractal Study on Infrared Thermal-Imaging Ying Wu, Mingqing Sun and Zhuoqiu Li

11:30-11:50	391	A Novel Fast Acquisition Algorithm For GPS C/A Signals Xiangzhen Yao, Xinxian Qin and Jinyun Fang
11:50-12:10	453	Parameter Estimation in Geographically weighted regression Juan Luo
GS12, Chair: Zohra Hemani		Location: Room E
Time	ID	Title & Authors
08:30-08:50	034	3D Remote Sensing Images Online Refining Hengjian Tong, Yun Zhang and Zhenfeng Shao
08:50-09:10	111	GeoInt Integration for Persistent Surveillance Zohra Hemani, Ray Renner, George Tjoumas, Kimberly Turley, Craig Callender, Becky Elstad and Paul Smith
09:10-09:30	404	404 Efficient Managing Large Scale Species Range Maps in a Spatial Database Environment Jianting Zhang
09:30-09:50		
09:50-10:10		
Coffee Break		
10:30-10:50		
10:50-11:10		
11:10-11:30		
11:30-11:50		
11:50-12:10		
PS01, Chair:		Location: Room F
Time	ID	Title & Authors
08:30-12:10	011	Geospatial Information Semantic Retrieval Algorithm Research Based on Geo-ontology Wei Liu, Yunyan Du, Hairong Zhang and Rulin Xiao
	030	Model of Incremental Changes of Geographical Object Based on Multi-States Huaji Zhu, Huarui Wu, Xiang Sun and Shaojuan Ma
	058	A Dynamic Schema Matching Approach for Multi-Version Web Feature Service Retrieve Jie He, Nengcheng Chen and Wei Wang
	064	Resource Oriented Architecture for Heterogeneous Geo-Processing Workflow Integration Nengcheng Chen, Liping Di, Peisheng Zhao and Genong Yu.
	056	Building Depth Images from Scattered Point Cloud Shuangfeng Wei and Hong Chen
	229	Study on Risk assessment model of urban Drought in Hilly Area of Central Sichuan Basin - A Case Study of Nanchong City Liangqun Jiang, Youlong Zhai, Bin Zhang, Chengqiang Shu and Lili Wang
	294	Improvement of an Aerodynamic Roughness Model With Meteorological Measurements and TM Image Yanlian Zhou, Xiaomin Sun and Weimin Ju
	296	A Transit Path Planning Model Based on the Heterogeneous Road Network Ting Zhao and Jinyun Fang

List of Special Sessions:

SS-SPC: Students Paper Competition

SS01: Virtual globes and sub-meter resolution mapping for integration of social and ecological sciences Virtual globes and sub-meter resolution mapping

SS02: Geographical Knowledge: Representation and Manipulation

SS03: Agricultural Geoinformatics & Its Applications

SS04: Data Mining for Geoinformatics

SS05: High-Resolution Remote Sensed Image Understanding

SS06: Utilization, Management and Protection of Basin's Water Resource

SS07: High Performance Geo-Computation

SS08: Remote Sensing of Environment and Climate
SS09: Disaster Monitoring and Management
SS10: Geospatial Web Services and Workflow
SS11: Service Oriented Architecture in Geoscience
SS12: OGC Standards and their applications