Spatial Diversity

Registration Brochure

Surveying & Spatial Sciences Institute
Biennial International Conference 2009

28 September – 2 October 2009
Adelaide Convention Centre
Adelaide, Australia

Important Dates
Early Bird Registration Deadline: 21 August 2009
Accommodation Booking Deadline: 21 August 2009

www.ssc2009.com
Invitation from the Convenor

Dear colleagues and friends

It is with great pleasure that I invite you to attend SSC2009: the Biennial International Conference of the Surveying and Spatial Sciences Institute (SSSI) to be held in Adelaide, South Australia, Australia from 28 September to 2 October 2009.

The Surveying and Spatial Sciences Institute was recently formed when members of the Spatial Sciences Institute and the Institution of Surveyors voted to merge. SSSI brings together the best of the two bodies, and strengthens the voice of spatial professionals in Australia and New Zealand. The SSC biennial conference, previously an event of the SSI, will continue with the new Institute, and we are confident that the inaugural SSSI conference in Adelaide will be the biggest and best yet.

The biennial conference is the premier event for surveying and spatial sciences in the Australasian region. It attracts a large and diverse audience and in 2009 will embrace a new format. The South Australian regional committee for the Surveying and Spatial Sciences Institute is very excited about the event, which will provide cutting edge developments in the application of spatial science to a diverse set of disciplines, communities and people: indeed this diversity is the inspiration for the conference theme of Spatial Diversity.

The conference theme will be delivered to you via plenary and keynote presentations, technical papers, symposia, workshops, competitions, awards, dinners, lunches, coffee, exhibitions, breakfasts, walks and talks. We are attracting key players in the industries where spatial information is so important – environment, mining, defence, land administration, agriculture, disaster management and more. Together with these people we are engaging a large range of exhibitors of technology and applications. This will all be delivered to you in one of the world’s best convention centres, right in the heart of a very friendly city.

In addition to the many attractions that the city of Adelaide has to offer, Adelaide is also the gateway to a range of regional touring experiences. From here you can visit our renowned wineries, take in the wonders of our natural habitats in places like Kangaroo Island, the Flinders Ranges, or the Great Australian Bight where the fishing and whale watching are second to none.

I sincerely trust that you will join us at SSC2009 and that you plan now for Adelaide, South Australia, 28 September – 2 October, 2009.

Associate Professor David Bruce
SSC2009 Convenor

Organising Committee

David Bruce (Convenor)     Jason Dreimanis
Penny Baldock              Gary Maguire
Mike Burdett               Bertram Ostendorf
James Cameron              Richard Retallack
Paul Corcoran              Dimity Watson
James Curnow
Keynote Speakers

**Prof. Kristen Kurland**
Carnegie Mellon University, Pittsburgh

Kristen Kurland holds a joint faculty appointment between Carnegie Mellon University’s H. John Heinz III College and School of Architecture. In addition to her full time position at CMU, she is the president of the University of Pittsburgh Graduate School of Public Health, Children’s Hospital of Pittsburgh, University of Pittsburgh Medical Center, and the RAND Corporation.


**Ed Parsons**
Google UK

Ed Parsons is the Geospatial Technologist of Google, with responsibility for evangelising Google’s mission to organise the world’s information using geography, and tools including Google Earth, Google Maps and Google Maps for Mobile.

Ed was the first Chief Technology Officer in the 200-year-old history of Ordnance Survey, and was instrumental in moving the focus of the organisation from mapping to Geographical Information.

Ed came to the Ordnance Survey from Autodesk, where he was EMEA Applications Manager for the Geographical Information Systems (GIS) Division. During his tenure, he helped Autodesk to become one of the key providers of GIS software. Earlier in his career he was a Senior Lecturer at Kingston University, where he helped establish Europe’s first undergraduate course in GIS.

He earned a Masters degree in Applied Remote Sensing from Cranfield Institute of Technology and is a fellow of the Royal Geographical Society, London. He is the author of numerous articles, professional papers and presentations to International Conferences, and has developed one of most popular Weblogs in the Geospatial Industry, www.edparsons.com.

Kevin D. Pomfret
Open Geospatial Consortium

Kevin is a business lawyer with a focus on Spatial Law – the legal and policy issues associated with spatial data and spatial technology including, intellectual property rights, licensing, liability, privacy and national security. He regularly counsels businesses on licensing and distribution agreements, mergers and acquisitions and regulatory issues and consults with government officials on developing legal and policy frameworks to support spatial data infrastructures. Kevin is a member of the Board of Directors of the Open Geospatial Consortium. He writes and speaks extensively on spatial law and technology and teaches a class on Spatial Law in masters-level program for GIS professionals. He has been recognized as a Virginia “Super Lawyer” and a member of Virginia’s “Legal Elite.”

Prior to attending law school, Kevin served as a satellite imagery analyst with the U.S. government. In that capacity he developed an imagery collection strategy to monitor critical arms control agreements. He also served as the special assistant to the U.S. government official responsible for developing the Intelligence Community’s satellite imagery collection and exploitation requirements.

Invited Speakers

**Andrew Campbell** – Triple Helix Consulting, Australia.

**Dr Steve Carver** – School of Geography, University of Leeds, UK.

**Professor Mark Daniel** – School of Health Sciences, University of South Australia.

**Dr Graham Harris** – Lancaster Environment Centre, Lancaster University, England.

**Professor Henry Nix** – Australian National University, Australia.

**Dr Russell Priestbenow** – Department of Natural Resources and Water, QLD, Australia.

**Richard Thackway** – Bureau of Rural Sciences, Canberra, Australia.
View Abstracts By Author

Abel, Nick
Building or Reducing Resilience in our Social-Ecological Systems

Adams, Matt
WA Experience with Land condition monitoring

Ahmad, Salahuddin
A GIS-based Approach to the Characterization of Spatial Accessibility to Healthcare Services by Local Communities in Urban Fringe Zones in Australia

Ahmad, Salahuddin
A Simple GIS-based Method for Transferring Census Data from CCDs to MBs

Ailleres, Laurent
A 3-Dimensional Visualization -Decision Support Tool For Groundwater-Surface Water Connectivity Assessment

AL Kahtani, Saad
Evaluating Methodologies of Measuring Accessibility to Tourist Attractions at the Micro and Macro Levels

Ali, Syed
A New Model of Object-Based Fusion Using Lidar and Multispectral Imagery For Forest Structure Assessment at the Tree Level

Andrew, Dempster
Evaluation of WiFi Technologies for Indoor Positioning Applications

Apan, Armando
Quantifying Biomass Changes in Mitchell Grassland Using MODIS Imagery and Precipitation Events

Apan, Armando
Rice Crop Mapping Using Radar Imagery: Comparison of Classification Accuracy of Different Envisat ASAR Modes and Classifiers

Apan, Armando
Simulating Spatial Variability of Cereal Yields From Historical Yield Maps and Satellite Imagery

Apan, Armando
Crop Maturity Mapping Using a Low-Cost Low-Altitude Remote Sensing System

Arkon, Kelly
Spatial Distribution of Infections of Wombats with Sarcoptic Mange

Arrowsmith, Colin
A Spatial Risk-Based Approach For Coastal Risk Management

Arrowsmith, Colin
Assessing the Utility of DMSP/OLS Night-Time Images to Characterize Indian Urbanization

Arrowsmith, Colin
Cross-cultural Spatial Behaviour in Tourism

Arrowsmith, Colin
Spatio-temporal Analysis of Micro-historical Cinematic Data

Arrowsmith, Colin
Typifying Spatial Behaviour For Visitors to National Parks: A Case Study in Port Campbell National Park

Arroyo, Lara
Object-oriented Mapping of Biophysical Riparian Zone Properties from High Spatial Resolution Imagery: Potential for Automation

Arundel, Jonathan
Potential Control Strategies For Epidemics Spreading Via Migratory Populations

Atkinson, Glenn
Predicting, Monitoring and Evaluating Soil Erosion Over NSW Using RUSLE and Time-Series Satellite Images

Aurambout, Jean-Philippe
An E-science Approach to Climate Change Adaptation

Baby, Sultana
Generation and Deployment of Detailed Geography in Management of Sites of Significance : A Case Study From the Inventory of the Heritage Assets of Phillip Island, Victoria, Australia

Bae, Kwang-Ho
An Automated Registration Method For 3D Laser Scanner Point Clouds and the Evaluation Of Its Convergence Region

Bae, Kwang-Ho
Tracking Roadside Kerbs in TLS Point Clouds using Principal Component Analysis

Bagheri, Pooya
Sustainable City - Making a City more Efficient by City Information Station

Baker, Alice
Assessment of Soil Properties From Soil Spectral Analysis

Baker, David
Spatial Expressions of Aboriginal Heritage Information: Arguments For An 'Aboriginal Methodology'

Bakker, Lidewij
Time-Series Land Cover Change in the Heytesbury Catchments, Western Australia

Bamber, Alec
Designing and Implementing the Australian Statistical Geography Standard (ASGS)

Bandalan, Elmer
Using Spatial Data Hiding for Location Privacy Protection: A Study of Abfuscation LBS

Barlow, Snow
Climate Change, Sustainable Agriculture And Environmental Management: A Regional Perspective

Bartolo, Renee
Spatial Information and Analysis for Climate Change Assessment in the Alligator Rivers Region, Northern Territory

Behn, Graeme
Exploiting Time Sequences of Satellite Imagery to Monitor Landscape Aspects

Bellette, Kathryn
Using Research Outcomes to Influence Natural Resource Management and Policy Decision Making - Are We in the Right Games?

Bellman, Chris
Applying Belief-Desire-Intention reasoning models to communicate spatial uncertainty in image classification
Note 4: Severe Wind Events Correlate with the Iasoberg Model Supporting the Argument for the Existence of the Allais Effect

Modelling of Spatial and Temporal Expansion of Built-Up And Residential-Commercial Dwellings of the Lower Hunter Region of NSW, Australia

Re-Engineering a Spatial Science Degree: Lessons and Experiences

Recent Expansion of the Southern Hairy-nosed Wombat in the Murraylands

Vertical and Horizontal Spatial Variability of Subsoil Constraints in North-Eastern Australia

"I Can't Be Green If I'm in the Red!" The Likely Adoption of Alternative Land Uses in the SA Cropping Region

Can We Avoid Spatial and Temporal Under-Sampling in Environmental Decision Making?

Determining Spatial Heterogeneity of Soil Properties to Assess Pesticide Movement

Landscape Scale Mapping of Social Catchments for Public Parks

Multi-scale Distribution Patterns of the Southern Hairy-nosed wombat

Opportunities For Carbon Sequestration From Revegetation in South Australia

Relationships Between Soil Properties, Terrain and Airborne Radiometric and Geophysical Data

Spatial Distribution of Infections of Wombats with Sarcoptic Mange

Towards Image-Based Monitoring of Soil Erosion Risk in Southern Australian Agricultural Lands

Validation of MODIS Chlorophyll-a Imagery in South Australian Coastal Waters

Where is Positional Uncertainty?

Publishing Large National Datasets in an Online Virtual Globe

Generalization Expert System: a Knowledge-Based Approach for Generalization of Line and Polyline Spatial Datasets

The Investment Framework For Environmental Resource (INFFER)

The Investment Framework For Environmental Resource (INFFER)

Understanding and Managing the Landscape as a Complex System: What Can Bottom-Up Modelling Approaches Contribute?

Increasing the Connections And Effectiveness Between NRM Regional Responsibilities, Local Government, Commodity Interests and Regional Communities

3D Urban Object Geometry from Airborne Laser Scanner Data

A Spatial Investment DSS Framework for Aquatic (waterways, estuaries and wetlands) and Biodiversity Management

Quantifying Biomass Changes in Mitchell Grassland Using MODIS Imagery and Precipitation Events

Interactive Campus Facility Mapping: Exemplification of Deployment In Bicycle-Parking Site Selection and in Service of Bike Parking

Coastal Lagoon Entrance Response to Catchment Changes: Generic and Local Implications From Two East Gippsland (Australia) Case Studies

Construction And Maintenance of Time-Series Digital Elevation Models For Townscape Modelling: A Case-Study From Lakes Entrance, Victoria, Australia

Long-Term Bathymetric Effects of Groyne-Field Emplacement En Echelon at Lakes Entrance, Victoria, Australia

Time-Series Land Cover Change in the Heytesbury Catchments, Western Australia

Evaluation of the Performance of DEM Interpolation Algorithms For Lidar Data

Mapping and Visualisation of Coastal Townscape Inundation Vulnerability: A Case-Study From Loch Sport, Victoria, Australia

Using GIS and Edge Detection to Map Urban Consolidation Patterns- A Case Study in City Of Monash, Australia

Visualisation of Coastal Zone Urban Area Inundation Via Stormwater Pipe Networks: A Case-Study From Lakes Entrance, Victoria, Australia

Depth Auto-Derivation via Aerial Images Using Artificial Neural Networks

Generation and Deployment of Detailed Geography in Management of Sites of Significance : A Case Study From the Inventory of the Heritage Assets of Phillip Island, Victoria, Australia