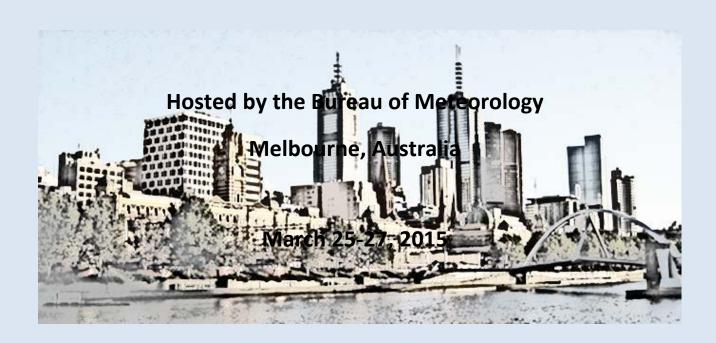
The International Symposium on **Environmental Software Systems**



PROGRAM



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Welcome

Welcome to the 2015 International Symposium on Environmental Software Systems, and also welcome to Melbourne, Australia. We have an excellent technical and social program available for the conference and I hope that all participants have a chance to be both informed and entertained.

I would like to acknowledge the significant efforts of the conference Organising Committee and the international Program Committee in bringing together such as fine technical program and conference proceedings, and also the efforts of all authors. Springer have assisted us in publishing the conference proceedings CD and the conference book, and have also made the proceedings available online during the conference. Thanks also to the staff of the Bureau of Meteorology and the volunteers who have assisted in bringing the conference together.

All the best for your time in Melbourne.

Dr Robert Argent

Conference Chairman, on behalf of the Organising Committee.

ISESS 2015 Review Description

For ISESS 2015 we received 104 abstracts in stage 1 of the submission process, with the majority in the form of a 3-4 page extended abstract. Most abstracts were reviewed by 3 independent reviewers, with 13 being reviewed by two reviewers. Twenty-one submissions were rejected, and 29 submissions were accepted conditionally. For stage 2, two independent reviewers were assigned to each full paper, many of whom had not reviewed the paper in stage 1. Sixty-one papers were accepted in the full paper review and published in the conference book after an editorial process, which amounts to an overall rejection rate of 41.3%.

Tuesday March 24, 2015

17:00	Registration - via Reception, 700 Collins St, Docklands
17:30 -	Icebreaker drinks and snacks
19:00	Watermark Pavilion - Tenancy 9/800 Bourke Street, Docklands

Wednesday March 25, 2015

	Level 6 Conference Area, 700 Collins St, Do	ocklands	
09:00	Registration		
	Welcome tea and coffee		
09:20	Plenary (Room 3)		
09:20-	Opening and Announcements, Acknowledg	gement of Country	
09:40	Chair: Robert Argent		
09:45	Room 1/2	Room 3	
	Chair: Robert Argent	Chair: Katharina Schleidt	
09:45	#23 (pg. 333) An Integrated Workflow Architecture for Natural Hazards, Analytics and Decision Support, <i>James Hilton</i>	#58 (pg. 217) Training support for crisis managers with elements of serious gaming, Denis Havlik	
10:10	#97 (pg. 445) Advanced Data Analytics and Visualisation for the Management of Human Perception of Safety and Security in Urban Spaces, <i>Lee Middleton</i>	#80 (pg. 455) Combined Aggregation and Column Generation for Land-Use Trade-Off Optimisation, Asef Nazari	
10:35	#69 (pg. 56) Crowdsourcing in Crisis and Disaster Management – Challenges and Considerations, Gerald Schimak	#110 (pg. 71) Evolution of Environmental Information Models, <i>Katharina Schleidt</i>	
11:00	Morning tea		
11:20	Chair: Ben Evans	Chair: David Segersson	
11:20	#71 (pg. 569) The NCI High Performance Computing and High Performance Data Platform to Support the Analysis of Petascale Environmental Data Collections, <i>Ben Evans</i>	#21 (pg. 141) The Emergency Response Intelligence Capability Tool, <i>Robert Power</i>	
11:45	#104 (pg. 561) The Czech e-Infrastructure and the European Grid Infrastructure Perspective, Ludek Matyska	#102 (pg. 151) Civic Issues Reporting and Involvement of Volunteers as a Phenomenon in the Czech Republic, <i>Jiří Kalina</i>	
12:10	#39 (pg. 542) Scalability of Global 0.25° Ocean Simulations using MOM, Marshall Ward	#31 (pg. 102) Towards Linked Data Conventions for Delivery of Environmental Data using netCDF, Jonathan Yu	
12:35	#64 (pg. 578) Big Data Architecture for Environmental Analytics, <i>Ritaban Dutta</i>	#63 (pg. 242) Exposure Modeling of Traffic and Wood Combustion Emissions in Northern Sweden - Application of the Airviro Air Quality Management System, <i>David Segersson</i>	
13:00	Lunch		
14:00	Chair: Brian Miles	Chair: Robert Argent	
14:00	#40 (pg. 552) A Performance Assessment of the Unified Model, <i>Dale Roberts</i>	#101 (pg. 361) National Environmental Data Facilities and Services of the Czech Republic and their Use in Environmental Economics, Jiří Hřebíček	

	Room 1/2		Room 3	
14:25	#41 (pg. 589) A Performance Study of	#70 (pg. 475) Underst	anding Connectivity
	Applications	in the Australian Community	between Groundwater Cl	nemistry Data and
	Climate and	Earth System Simulator,	Geological Stratigraphy v	a 3D Sub-surface
	Mark Chees	eman	Visualization and Analysis	i
			Jane Hunter	
14:50	#20 (pg. 599) A New Approach for	#48 (pg. 169) Provena	nce in Systems for
	Coupled Reg	gional Climate Modeling Using	Situation Awareness in E	nvironmental Monitoring,
	More than 1	.0,000 Cores, Marcus Thatcher	Markus Stocker	
15:15	Spatiotempo	oral monthly rainfall forecast for	37 (pg. 160) Mobile	Field Data Collection for
	south-easte	rn and eastern Australia using	Post Bushfire Analysis an	d African Farmers, Bradley
	climatic indi	ces, Maryam Montazerolghaem	Lane	
15:40	Afternoon tea			
16:00-	Workshops			
17:40				
Room 1		Room 2	Room 3	Room 9E
Evolution of		High Performance Computing	Crowd Sourcing	Modelling with
Information Models			(Gerald Schimak, Denis	Maple
			Havlik)	

Thursday March 26, 2015

	Level 6 Conference Area, 700 Collins St, D	ocklands	
08:45	Registration		
	Welcome tea and coffee		
09:00	Plenary (Room 3)		
09:00-	Chair: Gerald Schimak		
09:40	Announcements		
	Keynote: A Provenance Maturity Model, Kerry Taylor		
09:45	Room 1/2 Room 3		
	Chair: Denis Havlik	Chair: Thorston Schlachter	
09:45	#98 (pg. 44) The Framework for Environmental Software Systems of the European Environment Agency, Jiří Hřebíček	#14 (pg. 343) Quality Control of Environmental Measurement Data with Quality Flagging, Markus Stocke	
10:10	#49 (pg. 371) A Best of Both Worlds Approach to Complex, Efficient, Time Series Data Delivery, <i>Benjamin Leighton</i>	#82 (pg. 280) Implementing a Glossary and Vocabulary Service in an Inter-disciplinary Environmental Assessment for Decision Makers, Simon N. Gallant	
10:35	#106 (pg. 178) Decision Making and Strategic Planning for Disaster Preparedness with a Multi-Criteria-Analysis Decision Support System, Ralf Denzer	#19 (pg. 196) Water Pollution Reduction: Reverse Combinatorial Auctions Modelling Supporting Decision-Making Processes, <i>Petr Šauer</i>	
11:00	Morning tea		
11:20	Chair: Jiří Hřebíček	Chair: Uwe Rosebrock	
11:20	#26 (pg. 262) SPARK - a Bushfire Spread Prediction Tool, <i>Claire Miller</i>	#55 (pg. 293) Modelling of Air Flow Analysis for Residential Homes using Particle Image Velocimetry, <i>Rajiv Pratap</i>	
11:45	#72 (pg. 311) Ecohydrology Models Without Borders? Using Geospatial Web Services in EcohydroLib Workflows in the United States and Australia, <i>Brian Miles</i>	#103 (pg. 426) Three Levels of R Language Involve-ment in Global Monitoring Plan Warehouse Architecture, Jiří Kalina	

	Room 1/2		Room 3	
12:10	#8 (pg. 512) GeneralBlock: A C++ program for identifying and analyzing rock blocks formed by finite sized fractures, <i>Lu Xia</i>		#13 (pg.) Reconstructing the Carbon Dioxide Absorption Patterns of World Oceans using a Feed-Forward Neural Network: Software Implementation and Employment Techniques, Jiye Zeng	
12:35	12:35		#25 (pg. 113) Informat Residue Management: A C Freeware and Social Netwo José Tarcísio Franco de Car	orks
13:00	Lunch			
14:00-	Workshops			
15:40 Room 1		Room 2	Room 3	Room 9E
Evolution of Information Models		High Performance Computing	IFIP WG5.11 Meeting (Gerald Schimak WG Chair)	Modelling with Maple
15:40	Afternoon tea			
	room 1/2		room 3	
16:00	Chair: Jiri Kalina Chair: Ralf Denzer			
16:00	#42 (pg. 235) An Application Framework for the Rapid Deployment of Ocean Models in Support of Emergency Services: Application to the MH370 Search Wwe Rosebrock #96 (pg. 407) Context Ontology Modelling for Improving Situation Awareness and Crowd Evacuation from Confined Spaces, Lee Middleton United Spaces (pg. 407) Context Ontology Modelling for Improving Situation Awareness and Crowd Evacuation from Confined Spaces, Lee Middleton United Spaces (pg. 407) Context Ontology Modelling for Improving Situation Awareness and Crowd Evacuation from Confined Spaces, Lee Middleton United Spaces (pg. 407) Context Ontology Modelling for Improving Situation Awareness and Crowd Evacuation from Confined Spaces, Lee Middleton United Spaces (pg. 407) Context Ontology Modelling for Improving Situation Awareness and Crowd Evacuation from Confined Spaces, Lee Middleton United Spaces (pg. 407) Context Ontology Modelling for Improving Situation Awareness and Crowd Evacuation from Confined Spaces, Lee Middleton United Spaces (pg. 407) Context Ontology Modelling for Improving Situation Awareness and Crowd Evacuation from Confined Spaces (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awareness (pg. 407) Context Ontology Modelling for Improving Situation Awa		eness and Crowd	
16:25	#83 (pg. 351) Towards a Search Driven System Architecture for Environmental Information Portals, Thorsten Schlachter #62 (pg. 467) A Software Package for Automated Partitioning of Catchments, Ralf Den.		•	
16:50	Close			
18:30		o – Harbour View Room 51 Harbour Esplanade, Dockla inner	ands	
22:30	Close			

Friday March 27, 2015

	Level 6 Conference Area, 700 Collins St, I	Docklands
08:45	Registration; Welcome tea and coffee	
09:00	Plenary (Room 3)	
09:00-	Chair: Jiří Hřebíček	
09:40	Announcements, Keynote: Challenges in Modelling of Environmental Semantics, <i>Ioannis</i>	
	Athanasiadis	
09:45	Room 1/2	Room 3
	Chair: Markus Stocker	Chair: Ralf Denzer
09:45	#100 (pg. 520) On the Volume of Geo-	#99 (pg. 26) Topics in Environmental
	referenced Tweets and their Relationship to	Software Systems, Ralf Denzer
	Events Relevant for Migration Tracking,	
	Denis Havlik	
10:10	#46 (pg. 207) Scenario Planning Case	#66 (pg. 272) Construction of a Bio-Economic
	Studies using Open Government Data,	Model to Estimate the Feasibility and Cost of
	Lachlan Rudd	Achieving Water Quality Targets in the Burnett-
40.35	#00 (ng 200) Deguinement Francisco	Mary Region, Queensland, Craig Beverly
10:35	#90 (pg. 388) Requirements Engineering	#22 (pg. 282) Integrating Hydrodynamic and Hydraulic Modeling for Evaluating Future Flood
	for Emergency Situations, Jiří Barta (via video)	Mitigation in Urban Environments, Mahesh
	(via viaco)	Prakash
11:00	Morning tea	7.0.000
11:20	Chair: Lee Middleton	Chair: Robert Argent
11:20	#15 (pg. 321) A Distributed Computing	#68 (pg. 397) Requirements Engineering for
	Workflow for Modelling Environmental	Semantic Sensors in Crisis and Disaster
	Flows in Complex Terrain, Stuart R. Mead	Management, Gerald Schimak
11:45	#95 (pg. 303) Open Data Sources for the	#24 (pg. 252) Medium-Term Analysis of
	Development of Mobile Applications and	Agroeco-system Sustainability under Different
	Forecast of Microbial Contamination in	Land Use Practices by Means of Dynamic Crop
	Bathing Waters, Lee Middleton	Simulation, Sergey Medvedev (via video)
12:10	#86 (pg. 484) Distributed Minimum	#35 (pg. 492) A framework for optimal
	Temperature Prediction using Mixtures of Gaussian Processes, <i>Philip Sallis</i>	assessment of planning investments in urban water systems, Magnus Moglia
12:35	#59 (pg. 503) Measuring and	#61 (pg. 531) Benchmarking Systems and
12.33	Benchmarking Corporate Environmental	Methods for Environmental Performance
	Performance, Marie Pavláková Dočekalová	Models, Zuzana Chvátalová
	(Via Video)	,
13:00	Lunch	
14:00	Chair: Ari Jolma	Chair: Jamie Vleeshouwer
14:00	#107 (pg. 91) An Information Model for	#47 (pg. 226) A Software System for the
	a Water Information Platform, Ralf Denzer	Discovery of Situations Involving Drivers in
		Storms, Markus Stocker
14:25	#79 (pg. 121) Joining the Dots: Using	#44 (pg. 131) An SMS and Email Weather
	Linked Data to Navigate Between Features	Warning System for Sheep Producers, Anna
14.50	and Observational Data, Peter Taylor	Weeks
14:50	#32 (pg. 81) An Interactive Website for the River Eurajoki, <i>Ari Jolma</i>	#43 (pg. 187) A Cotton Irrigator's Decision Support System and Benchmarking Tool using
	the river Eurajoni, Arr Johnu	National, Regional and Local Data, Jamie
		Vleeshouwer
15:15	Plenary (Room 3)	
15:15-	Session chair: Robert Argent	
15:40	Workshop reports, Closing	
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Proceedings

Keynotes and context articles

#75 (pg. 1)	A Provenance Maturity Model <u>Kerry Taylor</u> , Robert Woodcock, Susan Cuddy, Peter Thew, David Lemon
#109 (pg. 19)	Challenges in Modelling of Environmental Semantics <u>Ioannis Athanasiadis</u>
#99 (pg. 26)	Topics in Environmental Software Systems <i>Ralf Denzer</i>
#98 (pg. 44)	The Framework for Environmental Software Systems of the European Environment Agency <u>Jiří Hřebíček</u> , Stefan Jensen, Chris Steenmans
#69 (pg. 56)	Crowdsourcing in Crisis and Disaster Management – Challenges and Considerations <u>Gerald Schimak</u> , Denis Havlik, Jasmin Pielorz
#110 (pg. 71)	Evolution of Environmental Information Models <u>Katharina Schleidt</u>
	Information systems, information modelling and semantics
#32 (pg. 81)	An Interactive Website for the River Eurajoki <u>Ari Jolma</u> , Anne-Mari Ventelä, Marjo Tarvainen, Teija Kirkkala
#107 (pg. 91)	An Information Model for a Water Information Platform Pascal Dihé, <u>Ralf Denzer</u> , Sascha Schlobinski
#31 (pg. 102)	Towards Linked Data Conventions for Delivery of Environmental Data using netCDF <u>Jonathan Yu</u> , Nicholas Car, Adam Leadbetter, Bruce A. Simons, Simon J.D. Cox
#25 (pg. 113)	Information Technology and Solid Residue Management: A Case Study Using Freeware and Social Networks
	<u>José Tarcísio Franco de Camargo</u> , Estéfano Vizconde Veraszto, Adriano Aparecido Lopes, Tainá Ângela Vedovello Bimbati
#79 (pg. 121)	Joining the Dots: Using Linked Data to Navigate Between Features and Observational Data Robert A. Atkinson, <u>Peter Taylor</u> , Geoffrey Squire, Nicholas J. Car, Darren Smith, Mark Menzel
#44 (pg. 131)	An SMS and Email Weather Warning System for Sheep Producers <u>Anna Weeks</u> , Malcolm McCaskill, Matthew Cox, Subhash Sharma
#21 (pg. 141)	The Emergency Response Intelligence Capability Tool <u>Robert Power</u> , Bella Robinson, Catherine Wise, David Ratcliffe, Geoffrey Squire, Michael Compton
#102 (pg. 151)	Civic Issues Reporting and Involvement of Volunteers as a Phenomenon in the Czech Republic Miroslav Kubásek (presented by <u>Jiří Kalina</u>)

- #37 (pg. 160) Mobile Field Data Collection for Post Bushfire Analysis and African Farmers

 Bradley Lane, Nicholas Car, Justin Leonard, Felix Lipkin, Anders Siggins
- #48 (pg. 169) Provenance in Systems for Situation Awareness in Environmental Monitoring <u>Markus Stocker</u>, Mauno Rönkkö, Mikko Kolehmainen

Decision support tools and systems

- #106 (pg. 178) Decision Making and Strategic Planning for Disaster Preparedness with a Multi-Criteria-Analysis Decision Support System

 Sascha Schlobinski, Giulio Zuccaro, Martin Scholl, Daniel Meiers, Ralf Denzer, Sergio

 Guarino, Wolf Engelbach, Kuldar Taveter, Steven Frysinger
- #43 (pg. 187) A Cotton Irrigator's Decision Support System and Benchmarking Tool using National,
 Regional and Local Data

 <u>Jamie Vleeshouwer</u>, Nicholas J. Car, John Hornbuckle
- #19 (pg. 196) Water Pollution Reduction: Reverse Combinatorial Auctions Modelling Supporting Decision-Making Processes

 Petr Šauer, Petr Fiala, Antonín Dvořák
- #46 (pg. 207) Scenario Planning Case Studies using Open Government Data Robert Power, Bella Robinson, <u>Lachlan Rudd</u>, Andrew Reeson
- #58 (pg. 217) Training support for crisis managers with elements of serious gaming

 <u>Denis Havlik</u>, Oren Deri, Kalev Rannat, Manuel Warum, Chaim Rafalowski, Kuldar Taveter,

 Peter Kutschera, Merik Meriste
- #47 (pg. 226) A Software System for the Discovery of Situations Involving Drivers in Storms

 <u>Markus Stocker</u>, Okko Kauhanen, Mikko Hiirsalmi, Janne Saarela, Pekka Rossi, Mauno
 Rönkkö, Harri Hytönen, Ville Kotovirta, Mikko Kolehmainen

Modelling and simulation systems

- #42 (pg. 235) An Application Framework for the Rapid Deployment of Ocean Models in Support of Emergency Services: Application to the MH370 Search

 <u>Uwe Rosebrock</u>, Peter R. Oke, Gary Carroll
- #63 (pg. 242) Exposure Modeling of Traffic and Wood Combustion Emissions in Northern Sweden Application of the Airviro Air Quality Management System

 Lars Gidhagen, Cecilia Bennet, <u>David Segersson</u>, Gunnar Omstedt
- #24 (pg. 252) Medium-Term Analysis of Agroecosystem Sustainability under Different Land Use Practices by Means of Dynamic Crop Simulation

 <u>Sergey Medvedev</u>, Alex Topaj, Vladimir Badenko, Vitalij Terleev
- #26 (pg. 262) SPARK a Bushfire Spread Prediction Tool

 <u>Claire Miller</u>, James Hilton, Andrew Sullivan, Mahesh Prakash
- #66 (pg. 272) Construction of a Bio-Economic Model to Estimate the Feasibility and Cost of Achieving Water Quality Targets in the Burnett-Mary Region, Queensland

 <u>Craig Beverly</u>, Anna Roberts, Geoff Park, Fred Bennett, Graeme Doole

#22 (pg. 282)	Integrating Hydrodynamic and Hydraulic Modeling for Evaluating Future Flood Mitigation in Urban Environments
	<u>Mahesh Prakash</u> , James Hilton, Lalitha Ramachandran
#55 (pg. 293)	Modelling of Air Flow Analysis for Residential Homes using Particle Image Velocimetry <u>Rajiv Pratap</u> , Ramesh Rayudu, Manfred Plagmann
#95 (pg. 303)	Open Data Sources for the Development of Mobile Applications and Forecast of Microbial Contamination in Bathing Waters Gianluca Correndo, Zoheir Sabeur (presented by Lee Middleton)
#72(pg. 311)	Ecohydrology Models Without Borders? Using Geospatial Web Services in EcohydroLib Workflows in the United States and Australia <u>Brian Miles</u> , Lawrence E. Band
	Architectures, infrastructures, platforms and services
#15 (pg. 321)	A Distributed Computing Workflow for Modelling Environmental Flows in Complex Terrain <u>Stuart R. Mead</u> , Mahesh Prakash, Christina Magill, Matt Bolger, Jean-Claude Thouret
#23 (pg. 333)	An Integrated Workflow Architecture for Natural Hazards, Analytics and Decision Support <u>James Hilton</u> , Claire Miller, Matt Bolger, Lachlan Hetherton, Mahesh Prakash
#14 (pg. 343)	Quality Control of Environmental Measurement Data with Quality Flagging Mauno Rönkkö, Okko Kauhanen, <u>Markus Stocker</u> , Harri Hytönen, Ville Kotovirta, Esko Juuso, Mikko Kolehmainen
#83 (pg. 351)	Towards a Search Driven System Architecture for Environmental Information Portals <u>Thorsten Schlachter</u> , Clemens Düpmeier, Oliver Kusche, Christian Schmitt, Wolfgang Schillinger
#101 (pg. 361)	National Environmental Data Facilities and Services of the Czech Republic and their Use in Environmental Economics
	Jana Soukopová, Jiří Hřebíček, Jiří Valta
#49 (pg. 371)	A Best of Both Worlds Approach to Complex, Efficient, Time Series Data Delivery <u>Benjamin Leighton</u> , Simon Cox, Nicholas J. Car, Matthew P. Stenson, Jamie Vleeshouwer, Jonathan Hodge
#82 (pg. 280)	Implementing a Glossary and Vocabulary Service in an Interdisciplinary Environmental Assessment for Decision Makers <u>Simon N. Gallant</u> , Rebecca K. Schmidt, Nicholas J. Car
	Requirements, software engineering and software tools
#90 (pg. 388)	Requirements Engineering for Emergency Situations Alena Oulehlová, <u>Jiří Barta</u> , Hana Malachová, Jiří F. Urbánek
#68 (pg. 397)	Requirements Engineering for Semantic Sensors in Crisis and Disaster Management Bojan Božić, Mert Gençtürk, Refiz Duro, Yildiray Kabak, <u>Gerald Schimak</u>
#96 (pg. 407)	Context Ontology Modelling for Improving Situation Awareness and Crowd Evacuation from Confined Spaces Gianluca Correndo, Banafshe Arbab-Zavar, Zlatko Zlatev, Zohair Sabeur, (presented by Lee Middleton)

- #13 (pg. 417) Reconstructing the Carbon Dioxide Absorption Patterns of World Oceans using a Feed-Forward Neural Network: Software Implementation and Employment Techniques Jiye Zeng, Hideaki Nakajima, Yukihiro Nojiri, Shin-ichiro Nakaoka
- #103 (pg. 426) Three Levels of R Language Involvement in Global Monitoring Plan Warehouse Architecture Jiří Kalina, Richard Hůlek, Jana Borůvkova, Jiří Jarkovský, Jana Klánová, Ladislav Dušek
- #53 (pg. 434) Process Design Patterns in Emergency Management Tomáš Ludík, Tomáš Pitner

Analytics and visualization

- #97 (pg. 445) Advanced Data Analytics and Visualisation for the Management of Human Perception of Safety and Security in Urban Spaces

 Panos Melas, Gianluca Correndo, Lee Middleton, Zoheir Sabeur
- #80 (pg. 455) Combined Aggregation and Column Generation for Land-Use Trade-Off Optimisation

 <u>Asef Nazari</u>, Andreas Ernst, Simon Dunstall, Brett Bryan, Jeff Connor, Martin Nolan
- #62 (pg. 467) A Software Package for Automated Partitioning of Catchments Ralf Denzer, Tobias Kalmes, Udo Gauer
- #70 (pg. 475) Understanding Connectivity between Groundwater Chemistry Data and Geological Stratigraphy via 3D Sub-surface Visualization and Analysis

 <u>Jane Hunter</u>, Andre Gebers, Lucy Reading, Sue Vink
- #86 (pg. 484) Distributed Minimum Temperature Prediction using Mixtures of Gaussian Processes Sergio Hernández, <u>Philip Sallis</u>
- #35 (pg. 492) A framework for optimal assessment of planning investments in urban water systems Rodolfo García-Flores, <u>Magnus Moglia</u>, David Marlow
- #59 (pg. 503) Measuring and Benchmarking Corporate Environmental Performance <u>Marie Pavláková Dočekalová</u>, Alena Kocmanová, Jana Hornungová
- #8 (pg. 512) GeneralBlock: A C++ program for identifying and analyzing rock blocks formed by finite sized fractures

 <u>Lu Xia</u>, Qingchun Yu, Youhua Chen, Maohua Li, Guofu Xue, Deji Chen
- #100 (pg. 520) On the Volume of Geo-referenced Tweets and their Relationship to Events Relevant for Migration Tracking

 Georg Neubauer, Hermann Huber, Armin Vogl, Bettina Jager, Alexander Preinerstorfer, Stefan Schirnhofer, Gerald Schimak
- #61 (pg. 531) Benchmarking Systems and Methods for Environmental Performance Models <u>Zuzana Chvátalová</u>, Jiří Hřebíček, Oldřich Trenz

High performance computing and Big Data

- #39 (pg. 542) Scalability of Global 0.25° Ocean Simulations using MOM Marshall Ward, Yuanyuan Zhang
- #40 (pg. 552) A Performance Assessment of the Unified Model <u>Dale Roberts</u>, Mark Cheeseman

#104 (pg. 561)	The Czech e-Infrastructure and the European Grid Infrastructure Perspective <u>Ludek Matyska</u>
#71 (pg. 569)	The NCI High Performance Computing and High Performance Data Platform to Support the Analysis of Petascale Environmental Data Collections Ben Evans, Lesley Wyborn, Tim Pugh, Jingbo Wang, Jon Smillie, Chris Allen, David Porter, Claire Trenham, Joseph Antony, Gavin Bell
#64 (pg. 578)	Big Data Architecture for Environmental Analytics <u>Ritaban Dutta</u> , Cecil Li, Daniel Smith, Aruneema Das, Jagannath Aryal
#41 (pg. 589)	A Performance Study of Applications in the Australian Community Climate and Earth System Simulator Mark Cheeseman, Ben Evans, Dale Roberts, Marshall Ward
#20 (pg. 599)	A New Approach for Coupled Regional Climate Modeling Using More than 10,000 Cores <u>Marcus Thatcher</u> , John McGregor, Martin Dix and Jack Katzfey



Logistics

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http://www.isess2015.org/index.php?pg=proceedings

Proceedings of ISESS 2001, ISESS 2003, ISESS 2005, ISESS 2007 and ISESS 2009 are available for PDF download at www.enviromatics.org

Program Overview

Tuesday 24 March

1700 Registration, via Reception, 700 Collins St, Docklands

17:30-19:30 Icebreaker (Watermark Pavilion - Tenancy 9/800 Bourke Street, Docklands)

Wednesday 25 March

09:00 Registration, Welcome tea and coffee, Level 6, 700 Collins St

09:20 Opening and welcome (Rooms 1/2 & 3)

9:45-16:00 Conference sessions with catering (Room 1/2 and Room 3)

16:00-17:40 Workshops (part 1) (Rooms 1, 2, 3, and 9E)

Thursday 26 March

08:45 Registration, Welcome tea and coffee, Level 6, 700 Collins St

09:00 Keynote (Rooms 1/2 & 3)

9:45-14:00 Conference sessions with catering (Room 1/2 and Room 3)

14:00-15:40 Workshops (part 2) (Rooms 1, 2, 3, and 9E)

15:40-16:50 Conference sessions with catering (Room 1/2 and Room 3)
18:30 Conference dinner, Woolshed Pub – Harbour View Room

Shed 9,T18/161 Harbour Esplanade, Docklands

Friday 27 March

08:45 Registration, Welcome tea and coffee, Level 6, 700 Collins St

09:00 Keynote (Rooms 1/2 & 3)

9:45-15:15 Conference sessions with catering (Room 1/2 and Room 3)

15:15-15:40 Workshop reports and close