

CONTENTS

POSTERS

PAPERS

- Y. Kamarianakis, N. Chrysoulakis, H. Feidas, G. Kokolatos: Comparing rainfall estimates derived from rain gages and satellite images at the eastern Mediterranean region 15
- C. Flueraru, G. Stancalie, E. Savin, V. Craciunescu: Validation of MODIS Snowcover Products in Romania. Methodology and conclusions 21
- F. Kovács, J. Szatmári, J. Rakonczai: Assessment of the special soil degradation (bench erosion) with GIS methods from the Great Hungarian Plain 29
- K. Aerts, K. Maesen, A. van Rompaey: A Practical Example of Semantic Interoperability of Large-Scale Topographic Databases Using Semantic Web Technologies 35
- J. Haist, R. Schnuck, T. Reitz: Usage of persistence framework technologies for 3D geodata servers 43
- R. Lemmens, C. Granell, A. Wytzisk, R. de By, M. Gould, P. van Oosterom: Semantic and syntactic service descriptions at work in geo-service chaining 51
- A. Dahlgren, L. Harrie: A test bench for evaluating spatial indexation methods for connecting points to large networks 62
- E. Nash, M. Kofahl: Specialist SDIs to Support Business Processes 72
- J. Lacasta, J. Nogueras-Iso, R. Tolosana, F. J. Lopez, F.J. Zarazaga-Soria: Automating the Thematic Characterization of Geographic Resource Collections by Means of Topic Maps 81
- B. Predic, D. Stojanovic, S. Djordjevic-Kajan: Developing Context Aware Support in Mobile GIS Framework 90
- M. Yuda, S. Itoh: Utilization of Geographic Information Systems in Education Reform in Japan 98
- L. Pásztor, J. Szabó: Increasing accuracy of a spatio-temporal soil information system by digital soil mapping and field GIS 104
- F. Reitsma, K. Hiramatsu: Exploring GeoMarkup on the Semantic Web 110
- A. Friis-Christensen, L. Bernard, I. Kanellopoulos, J. Nogueras-Iso, S. Peedell, S. Schade, C. Thorne: Building Service Oriented Applications on top of a Spatial Data Infrastructure – A Forest Fire Assessment Example 119
- H.R. Gnägi, A. Morf, P. Staub: Semantic Interoperability through the Definition of Conceptual Model Transformations 128
- L. Pásztor, I. Pálfai, Cs. Bozán, J. Körösparti, J. Szabó, Zs. Bakacsi, L. Kuti: Spatial stochastic modelling of inland inundation hazard 139

- A. Álvarez-Robles, F.J. Zarazaga-Soria, M.Á. Latre, R. Béjar, P.R. Muro-Medrano: Water quality monitoring based on sediment distribution using satellite imagery 144
- I. Nagy, P. Burai, P. Takács, J. Tamás: Field size precision water management based on time series analysis of satellite images 151
- J. Haist, P. Korte: Adaptive streaming of 3D-GIS geometries and textures for interactive visualisation of 3D city models 160
- T. Osaragi: A Method for Detecting Space Cluster Using Geographic Raster Data 168
- K.E. Scott, T.J. Oyana: An Improved Algorithm for Segregating Large Geospatial Data 177
- J.V. Christensen: Formalizing Specifications for Geographic Information 186
- A. Greenhalgh, P. James, D. Fairbairn: Encoding Semantics in the DNF 195
- B. Jiang, I. Omer: Spatial Topology and its Structural Analysis based on the Concept of Simplicial Complex 204
- L. Stoimenov, S. Djordjevic-Kajan: Discovering Mappings between Ontologies in Semantic Integration Process 213
- E. Tomai, P. Prastacos: A Framework for Intensional and Extensional Integration of Geographic Ontologies 220
- T.T. Pham, V.P. Luong, R. Jeansoulin: Formalism for representing data quality in non redundant spatial information 228
- P. Weber, D. Chapman, M. Hardwick: 'London Calling' - A Spatial Decision Support System for inward investors 239
- M. Olofsson, A. Östman: Optimizing Dynamic Network Configurations 247
- N. Molines, D. Siret, M. Musy, D. Groleau: Benefits and limits of GIS for managing heterogeneous environmental data in sustainable urban design: example of the ADEQUA project 255
- J. Bulens, A. Ligtenberg: The MapTable, an interactive instrument for spatial planning design processes 263
- C. Kiehle, K. Greve, C. Heier: Standardized Geoprocessing - Taking Spatial Data Infrastructures one Step Further 273
- E. Andreu, R. Béjar, M.Á. Latre, S. Martínez, P.R. Muro-Medrano: A Pattern-Based Approach to Support Automatic Homogeneous Map Labeling with Texts, Charts and Other Elements in a WMS 283
- N. Andrienko, G. Andrienko: Intelligent Visualisation and Information Presentation for Civil Crisis Management 291

POSTERS

- M. Fan, C. Chen, T. Chi, J. Lin: Design and implementation of ocean dynamic environmental data integrating and information sharing system in Fujian Province 301
- M. Painho, I. Jovani, P. Curvelo: Searching for e-learning curricula in geographical information systems and science 309
- T. Johansson, P. Pellikka: GISAS – geographical information systems applications for schools 317
- M. Painho, T. Bartoschek, R. Henriques: Geostatistical approach for controlling bus movements in Greater Lisbon using GPS 319
- I. Compte, A. Hernández, F. Marucci, F. Orduña: SIGFRUT: A WEBGIS application for designing agricultural plantations and installations 325
- J. Mészáros, I. Szakadát, F. Speiser, N. Solymosi: Political and social statistics geodatabase 332
- M. Rouai: Multifractal properties and connectivity of fracture network in the middle atlas liasic aquifer (Morocco) 339
- T. Bíró, J. Tamás: Hydrodynamic and water quality model using GIS techniques 345
- U. Avdan, M. Tün, E. Pekkan, M. Altan: Analysis of urbanization change according to NEHRP soil classification map 350
- L. Živković: Similarities and differences between Serbian and Dutch spatial planning systems (SPSs): Obstacles and advantages for GIS support 359
- L. Tang, C. Chen, H. Huang, K. Lin: On HLA-based forest fire fighting simulation system 366
- R. Fencík, M. Vajsáblová: Parameters of interpolation methods of creation of digital model of landscape 374
- E. Coll, J.-C. Martínez, J.G. Sanz: Serving cartography raster data in the Internet, a performance study 382
- Y. Hirata: Estimation of stand attributes in *Cryptomeria japonica* and *Chamaecyparis obtusa* stands using QuickBird panchromatic data 391