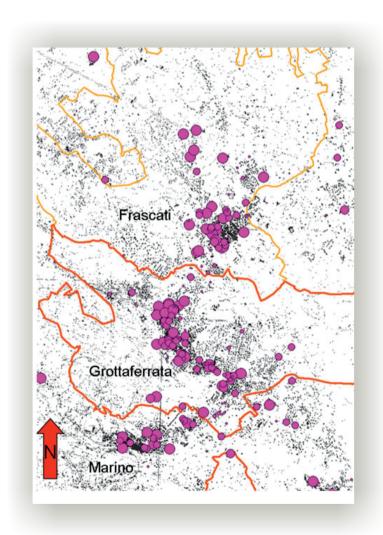


Journal of Geographic Information System

Editor-in-Chief: Prof. Jordi Martí-Henneberg





Journal Editorial Board

ISSN: 2151-1950 (Print) ISSN: 2151-1969 (Online)

http://www.scirp.org/journal/jgis

.....

Editor-in-Chief

Prof. Jordi Martí-Henneberg University of Lleida, Spain

Associate Editor-in-Chief

Prof. Francisco J. Tapiador University of Castilla-La Mancha (UCLM), Spain

Editorial Board

Dr. Alia I. Abdelmoty Cardiff University, UK

Prof. Carlos Marcelo Di Bella Instituto de Clima y Agua CIRN-INTA Castelar, Argentina

Prof. Christophe Claramunt Naval Academy Research Institute, France

Prof. Weihong Cui International Europe and Asia Academy of Sciences, China

Prof. Fuchu Dai Chinese Academy of Sciences, China

Prof. Anrong DangTsinghua University, ChinaDr. Hossein GhadiriGriffith University, Australia

Prof. Shuanggen Jin Shanghai Astronomical Observatory, China

Dr. Saro LeeKorea Institute of Geoscience and Mineral Resources, South Korea

Dr. Xiang LiEast China Normal University, China**Prof. Hervé Martin**Joseph Fourier University, France

Prof. Mainguenaud Michel Institut National des Sciences Appliquées, France

Dr. Saied Pirasteh University of Waterloo, Canada

Prof. Biswajeet Pradhan Dresden University of Technology, Germany

Dr. Michael D. ProctorUniversity of Central Florida, USA

Dr. Xiaosheng Qin Nanyang Technological University, Singapore

Prof. Shih-Lung Shaw University of Tennessee, USA

Dr. Eddy Lynn Usery Center of Excellence for Geospatial Information Science, USA

Dr. Herna Viktor University of Ottawa, Canada

Prof. Jianhua XuEast China Normal University, ChinaProf. Xiaohuan YangChinese Academy of Sciences, China

Prof. Axing Zhu University of Wisconsin, USA

Dr. Liangfeng Zhu East China Normal University, China

Volume 4

Number 6



December 2012

TABLE OF CONTENTS

Land Use and Land Cover Changes of West Tahta Region, Sohag Governorate, Upper Egypt I. Esam, F. Abdalla, N. Erich	483
Traffic Fluxes and Urban Congestion: A Simple Approach with the <i>Attractors</i> ' Method	
E. Loret, G. Gullotta, M. Fea, F. Sarti	494
Proposal for the Introduction of the Spatial Perspective in the Application of Global Sensitivity	•
W. Plata-Rocha, M. Gómez-Delgado, J. Bosque-Sendra.	
The Relevance of Web Mapping Infrastructures in a Web Portal for Desktop and Mobile Device A Case Study	es:
K. Behncke, M. Ehlers.	514
Spatio-Temporal Land Cover Dynamics in Open Cast Coal Mine Area of Singrauli, M.P., India I. Khan, A. Javed	
Customized Online Aggregation & Summarization Tool for Environmental Rasters (COASTER	R)
D. J. Weiss, K. Gibson, C. Sojka, J. W. Sheldon, R. L. Crabtree.	530
Validation of CA-Markov for Simulation of Land Use and Cover Change in the Langat Basin, Mala H. Memarian, S. K. Balasundram, J. B. Talib, C. T. B. Sung, A. M. Sood, K. Abbaspour	•
Urban Growth Prediction: A Review of Computational Models and Human Perceptions	
D. Triantakonstantis, G. Mountrakis	555
Integrated Approach of Universal Soil Loss Equation (USLE) and Geographical Information Sy (GIS) for Soil Loss Risk Assessment in Upper South Koel Basin, Jharkhand	ystem
R. Parveen, U. Kumar	588
Cloud Computing as an Innovation in GIS & SDI: Methodologies, Services, Issues and Deployn	nent
Techniques	
M. Naghavi	597

The figure on the front cover is from the article published in Journal of Geographic Information System, 2012, Vol. 4, No. 6, pp. 494-502 by Emanuele Loret, Gaia Gullotta, Maurizio Fea and Francesco Sarti.

Copyright © 2012 SciRes.

Journal of Geographic Information System (JGIS)

Journal Information

SUBSCRIPTIONS

The *Journal of Geographic Information System* (Online at Scientific Research Publishing, www.SciRP.org) is published bimonthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$59 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright@2012 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

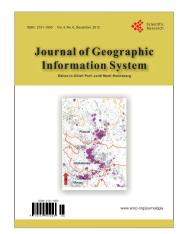
Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assumes no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: jgis@scirp.org



Call for Papers

Journal of Geographic **Information System (JGIS)**

ISSN 2151-1950 (Print) ISSN 2151-1969 (Online)

http://www.scirp.org/journal/jgis/

JGIS is an international refereed journal dedicated to the latest advancement of Geographic Information System. The goal of this journal is to keep a record of the state-of-the-art research and promote the research work in these fast moving areas. The journal publishes the highest quality, original papers included but not limited to the fields:

Editor-in-Chief

Prof. Jordi Martí-Henneberg

University of Lleida, Spain

Subject Coverage

- Cartography and Geodesy
- Computational Geometry
- Computer Vision Applications in GIS
- Distributed, Parallel, and GPU Algorithms for GIS
 Spatial Data Structures and Algorithms
- Earth Observation
- Environmental Geomatics—GIS, RS and Other **Spatial Information Technologies**
- Geographical Analysis for Urban and Regional Development
- Geographic Information Retrieval
- GIS and Cloud Computing
- GIS and High Performance Computing
- Human Computer Interaction and Visualization
- Image and Video Understanding
- Location-Based Services
- Location Privacy, Data Sharing and Security
- Performance Evaluation
- Photogrammetry
- Similarity Searching
- Social Networks and Volunteer Geographic
- Spatial Analysis and Integration

- Spatial and Spatio-Temporal Information Acquisition
- Spatial Data Mining and Knowledge Discovery
- Spatial Data Quality and Uncertainty
- Spatial Data Warehousing, OLAP, and Decision Support
- Spatial Information and Society
- Spatial Modeling and Reasoning
- Spatial Query Processing and Optimization
- Spatial Semantic Web
- Spatio-Temporal Data Handling
- Spatio-Temporal Sensor Networks
- Spatio-Temporal Stream Processing
- Spatio-Textual Searching
- Standardization and Interoperability for GIS
- Storage and Indexing
- Systems, Architectures and Middleware for GIS
- Traffic Telematics
- Transportation
- Visual Languages and Querying
- Wireless, Web, and Real-Time Applications

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the JGIS.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

http://www.scirp.org/journal/jgis E-mail: jgis@scirp.org