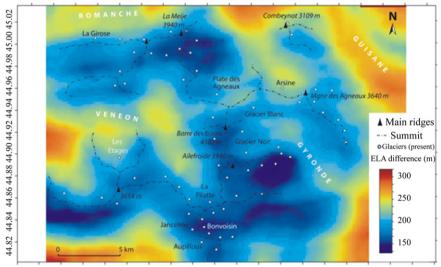


Journal of Geographic Information System

Editor in Chief: Prof. Jordi Marti Henneberg



 $6.18 \hspace{0.1cm} 6.20 \hspace{0.1cm} 6.22 \hspace{0.1cm} 6.24 \hspace{0.1cm} 6.26 \hspace{0.1cm} 6.28 \hspace{0.1cm} 6.30 \hspace{0.1cm} 6.32 \hspace{0.1cm} 6.34 \hspace{0.1cm} 6.36 \hspace{0.1cm} 6.38 \hspace{0.1cm} 6.40 \hspace{0.1cm} 6.42 \hspace{0.1cm} 6.44 \hspace{0.1cm} 6.46 \hspace{0.1cm} 6.48 \hspace{0.1cm} 6.50 \hspace{0.1cm} 6.52 \hspace{0.1cm} 6.54 \hspace{0.1cm}$





www.scirp.org/journal/jgis

Journal Editorial Board

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

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

Editor in Chief	
Prof. Jordi Marti 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	University of Buenos Aires, 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 Dang	Tsinghua University, China
Dr. Hossein Ghadiri	Griffith University, Australia
Prof. Shuanggen Jin	Shanghai Astronomical Observatory, China
Dr. Saro Lee	Korea Institute of Geoscience and Mineral Resources, Korea (South)
Dr. Xiang Li	East China Normal University, China
Prof. Hervé Martin	Joseph Fourier University, France
Prof. Mainguenaud Michel	Institut National des Sciences Appliquées, France
Dr. Saied Pirasteh	University Putra Malaysia (UPM), Malaysia
Prof. Biswajeet Pradhan	Dresden University of Technology, Germany
Dr. Michael D. Proctor	University of Central Florida, USA
Dr. Xiaosheng Qin	Nanyang Technological University, Singapore
Prof. Shih-Lung Shaw	University of Tennessee, USA
Prof. Xiaohua Tong	Tongji University, China
Dr. Eddy Lynn Usery	Center of Excellence for Geospatial Information Science, USA
Dr. Herna Viktor	University of Ottawa, Canada
Prof. Xincai Wu	China University of Geosciences, China
Prof. Jianhua Xu	East China Normal University, China
Prof. Xiaohuan Yang	Chinese Academy of Sciences, China
Prof. Axing Zhu	University of Wisconsin, USA
Dr. Liangfeng Zhu	East China Normal University, China

Editorial Assistant

Lee Gan

. .

Scientific Research Publishing, USA Email: jgis@scirp.org

Journal of Geographic Information System(JGIS) is a comprehensive international journal published by Research Center for GIS Software and Application Engineering, Ministry of Education, Zondy Cyber and SRP(Scientific Research Publishing).



TABLE OF CONTENTS

Volume 3 Number 3	July 2011
Land Use and Land Cover Changes in Arid Region: The Case New Urbani Cairo, Egypt	zed Zone, Northeast
R. Zaki, A. Zaki, S. Ahmed	
A Spatially Heterogeneous Expert Based (SHEB) Urban Growth Model Us	ing Model Regionalization
D. Triantakonstantis, G. Mountrakis, J. D. Wang	
Soil Database Management Software Development for Optimizing Land Re Utilization to Support National Food Security	esource Information
R. Shofiyati, S. Bachri, M. Sarwani	
Detecting Slums from SPOT Data in Casablanca Morocco Using an Object	Based Approach
H. Rhinane, A. Hilali, A. Berrada, M. Hakdaoui	
GIS-Based Spatial Mapping of Flash Flood Hazard in Makkah City, Saudi	Arabia
G. M. Dawod, M. N. Mirza, K. A. Al-Ghamdi	
Mapping Glacier Variations at Regional Scale through Equilibrium Line A GIS and Statistical Application in Massif des Écrins (French Alps)	ltitude Interpolation:
É. Cossart	
Characterisation of Landscape with Forest Fragmentation Dynamics	
T. V. Ramachandra, U. Kumar	
A Fire Risk Modelling and Spatialization by GIS	
M. S. Guettouche, A. Derias, M. Boutiba, M. ou A. Bounif, M. Guendouz, A. Boudella	

The figure on the front is from the article published in *Journal of Geographic Information System*, 2011, Vol. 3, No. 3, pp. 232-241 by Étienne Cossart.

Journal of Geographic Information System

Journal Information

SUBSCRIPTIONS

The *Journal of Geographic Information System* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly 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©2011 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

Journal of Geographic Information System (JGIS)

ISSN 2151-1950 (print) ISSN 2151-1969 (online)

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

Journal of Geographic Information System (JGIS) is a comprehensive international academic theory journal associated published by Zondy Cyber Group and SRP (Scientific Research Publishing) Inc. The goal of this journal is to provide an international platform for engineers and academicians all over the world to promote, share, and discuss various new issues and developments in relevant GIS fields.

Editor-in-Chief

Prof. Xincai Wu, China University of Geosciences, China

Subject Coverage

- Cartography and Geodesy
- Cartography and Geodesy
- Computational Geometry
- Computer Vision Applications in GIS
- Distributed, Parallel, and GPU Algorithms for GIS 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 Structures and Algorithms
- 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

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 JGIS online system. All papers are refereed through a peer review process.

For more details about the submissions, please access the website.

Website and E-Mail

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