

Spatial decision support systems have been in use for a long time. In recent years significant developments related to the evolution of general purpose geographic information systems have been achieved. Due to the increasing demands for more spatial analysis functionality in GIS and more spatial decision support systems the International Society of Photogrammetry and Remote Sensing (ISPRS) has established two Working Groups: WG II/5 Design and Operation of Spatial Decision Support Systems and WG II/6 Spatial Analysis and Visualisation Systems

This book is a compendium of peer-reviewed articles selected from the ISPRS Workshop on Spatial Analysis and Decision Making, organised by ISPRS Working Groups II/5 and II/6, held in Hong Kong, from 3-5 December 2003. It gives a broad overview of issues in spatial analysis and decision making, such as image-based spatial analysis and decision making, 3-D modelling and analysis, general spatial analysis methodology, spatio-temporal analysis methodology, Web- and mobile-based spatial analysis, knowledge-based systems, integrated systems, visualisation and representation methodology, and some application systems.

Advances in Spatial Analysis and Decision Making contributes to the development and validation of end-to-end processing systems for specific applications, making use of a range of imaging systems, a range of components from the spatial information sciences and paying particular attention to techniques for the delivery and presentation of information.

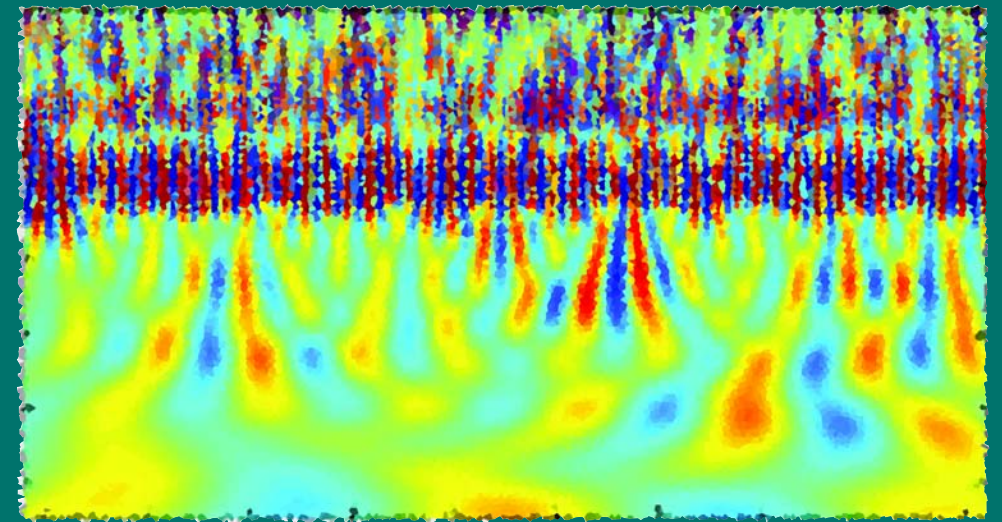
INTERNATIONAL SOCIETY FOR PHOTOGRAMMETRY AND REMOTE SENSING
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Advances in Spatial Analysis and Decision Making

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editors

Zhilin Li Qiming Zhou Wolfgang Kainz



ADVANCES IN SPATIAL ANALYSIS AND DECISION MAKING

International Society for Photogrammetry and Remote Sensing (ISPRS) Book Series

Book Series Editor

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Haifa, Israel



A SELECTION OF PEER-REVIEWED PAPERS PRESENTED AT THE
ISPRS WORKSHOP ON SPATIAL ANALYSIS AND DECISION MAKING,
3–5 DECEMBER 2003, HONG KONG, CHINA

Advances in Spatial Analysis and Decision Making

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A.A. BALKEMA PUBLISHERS

LISSE / ABINGDON / EXTON (PA) / TOKYO

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Published by: A.A. Balkema, a member of Swets & Zeitlinger Publishers
www.balkema.nl and www.szp.swets.nl

ISBN 90 5809 652 1
ISSN 1572-3348

Printed in the Netherlands

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Preface

It is my pleasure to write the preface for the first book in newly launched ISPRS Book Series. The ISPRS Book Series is intended to comprise high quality scientific contributions in the photogrammetry, remote sensing and spatial information sciences, with the aim of promoting the quality and range of the scientific output of ISPRS. The contributions will be rigorously peer-reviewed by experts in the field and are expected to be leading articles in the topic of each book. The Series may also include textbooks or translations of textbooks and books on advanced scientific topics that are not directly related to ISPRS events, and high quality tutorials if appropriate.

The activities of ISPRS cover a broad range of topics in the photogrammetry, remote sensing and spatial information sciences. This book is a contribution from ISPRS Technical Commission II – Systems for Spatial Data Processing, Analysis and Representation. Commission II covers topics which include design and development of systems for measurement, processing, analysis, representation and storage of image and geospatial data; system integration and modeling aspects for data and information processing; analysis of systems and their components for automated and semi-automatic digital processing systems; systems for production and update of geoinformation; and interoperability of spatial information systems.

This book is the result of the hard work of the editors Zhilin Li, Qiming Zhou and Wolfgang Kainz, Chairs and Co-Chairs of ISPRS Working Groups II/5 and II/6 in Commission II, in attracting a review panel and compiling the final papers. They deserve recognition for their hard work in producing this book. The book was prepared for the workshop on Joint Workshop of ISPRS Working Groups II/5 and II/6 in Commission II on Spatial Analysis and Decision Making Spatial Analysis Methodology, held in Hong Kong from 2–5 December 2003. As expressed in the introduction by the editors, while the traditional aspects of GIS have been growing rapidly over recent years, new developments have focused on the geographic information service and delivery, which will realise the benefits of spatial information to the community. The analysis and application of spatial information for decision support systems is an important development in realising these benefits.

I hope that readers will find this book of benefit in understanding the developments in the emerging areas of the analysis and application of spatial information for decision support.

John Trinder
President, ISPRS

