

1. Record Nr.	UNINA9910830909203321
Titolo	Models in spatial analysis [[electronic resource] /] / edited by Lena Sanders
Pubbl/distr/stampa	London ; ; Newport Beach, CA, : ISTE, 2007
ISBN	1-280-84762-X 9786610847624 0-470-39448-X 0-470-61225-8 1-84704-559-6
Descrizione fisica	1 online resource (349 p.)
Collana	ISTE ; ; v.661
Altri autori (Persone)	SandersLena
Disciplina	910.01/5195 910.015195
Soggetti	Geography - Mathematical models Spatial analysis (Statistics) - Mathematical models Geomatics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Models in Spatial Analysis; Table of Contents; Preface; Introduction; Chapter 1. Modeling Concepts Used in Spatial Analysis; 1.1. Introduction; 1.2. Modeling universals; 1.2.1. Logical frames for modeling; 1.2.2. The language of models; 1.2.2.1. Material or physical model languages; 1.2.2.2. The language of images: iconic models; 1.2.2.3. Modeling in mathematical language; 1.3. A few specific features of spatial models; 1.4. Spatial models: a study grid; 1.4.1. Sequencing and explanation; 1.4.2. The group and the individual; 1.4.3. The random and the determined; 1.4.4. Movement and balance 1.5. Conclusion 1.6. Bibliography; Chapter 2. Geographical Scales and Multidimensional Statistical Methods; 2.1. Introduction; 2.2. Scaling issues; 2.2.1. The consideration of different geographical levels: two possible approaches; 2.2.2. Formalization of relations between two levels; 2.2.2.1. Nested relations and partition graph; 2.2.2.2. Neighborhood relations and proximity graphs; 2.2.3. Processing of multilevel information; 2.2.3.1. Multilevel structure and attributes;

2.2.3.2. Multidimensional statistical methods; 2.3. Change of levels, change of structures; 2.3.1. Scale and variability
2.3.2. Exploratory analysis of the scale system
2.3.2.1. Analysis of aggregated levels or interclass analysis; 2.3.2.2. Transition analysis between two levels or intraclass analysis; 2.3.3. Application of outlying Ouagadougou space to the social and spatial organization; 2.4. Integration of the different levels; 2.4.1. The scale: a set of territorial and spatial references; 2.4.2. The analysis of local differences; 2.4.3. Other local analysis methods; 2.5. Multilevel models; 2.5.1. Contextual effects and regression models; 2.5.2. Multilevel modeling; 2.6. Conclusion; 2.7. Bibliography
Chapter 3. Location of Public Services: From Theory to Application
3.1. Introduction; 3.2. The modeling approach; 3.2.1. A typology of public services: an attempt; 3.2.2. Estimating demand; 3.2.3. Analyzing supply; 3.2.4. Adjusting supply to demand; 3.2.5. Evaluating the solutions; 3.2.6. Methodological perspectives; 3.3. A prototype location model: the k-median; 3.4. An example: recycling centers; 3.4.1. The problem: the optimal location of recycling centers; 3.4.2. Results of the model; 3.5. Conclusion; 3.6. Bibliography; Chapter 4. Time-geography: Individuals in Time and Space
4.1. Introduction: why integrate "time" when we analyze space?
4.1.1. The study of spatio-temporal processes; 4.1.2. For a time-integrated geography; 4.2. The foundations of time-geography; 4.2.1. The premises; 4.2.2. A certain vision of the world; 4.3. The conceptual framework of time-geography; 4.3.1. The creation of a "notation system"; 4.3.2. Tools to decrypt daily life; 4.3.2.1. Trajectory, station, project: basic concepts; 4.3.2.2. Different types of constraints; 4.3.2.3. A transversal analysis of the "three worlds"; 4.4. Time-geography in practice
4.4.1. Simulation of individual activity programs: public transport possibilities in the city of Karlstad - an application by Bo Lenntorp

Sommario/riassunto

This title provides a broad overview of the different types of models used in advanced spatial analysis. The models concern spatial organization, location factors and spatial interaction patterns from both static and dynamic perspectives. Each chapter gives a broad overview of the subject, covering both theoretical developments and practical applications. The advantages of an interdisciplinary approach are illustrated in the way that the viewpoint of each of the individual disciplines are brought together when considering questions relevant to spatial analysis. The authors of the chapters
