

1. Record Nr.	UNINA9911020330003321
Autore	Lawson Andrew (Andrew B.)
Titolo	Disease mapping with WinBUGS and MLwiN / / Andrew B. Lawson, William J. Browne, Carmen L. Vidal Rodeiro
Pubbl/distr/stampa	Chichester, West Sussex, England ; ; Hoboken, NJ, : J. Wiley, c2003
ISBN	9786610270392 9781280270390 128027039X 9780470341643 0470341645 9780470856055 047085605X 9780470856062 0470856068
Descrizione fisica	1 online resource (293 p.)
Collana	Statistics in practice
Altri autori (Persone)	BrowneWilliam J <1972-> (William John) Vidal RodeiroCarmen L
Disciplina	615.4/2/0727
Soggetti	Medical mapping Medical geography - Maps - Data processing Epidemiology - Statistical methods Epidemiology - Data processing Public health surveillance
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 (p. 267-273) and index.
Nota di contenuto	Disease Mapping with WinBUGS and MLwiN; Contents; Preface; Notation; 0.1 Standard notation for multilevel modelling; 0.2 Spatial multiple-membership models and the MMMC notation; 0.3 Standard notation for WinBUGS models; 1 Disease mapping basics; 1.1 Disease mapping and map reconstruction; 1.2 Disease map restoration; 2 Bayesian hierarchical modelling; 2.1 Likelihood and posterior distributions; 2.2 Hierarchical models; 2.3 Posterior inference; 2.4 Markov chain Monte Carlo methods; 2.5 Metropolis and Metropolis-Hastings algorithms; 2.6 Residuals and goodness of fit; 3 Multilevel

modelling

3.1 Continuous response models 3.2 Estimation procedures for multilevel models; 3.3 Poisson response models; 3.4 Incorporating spatial information; 3.5 Discussion; 4 WinBUGS basics; 4.1 About WinBUGS; 4.2 Start using WinBUGS; 4.3 Specification of the model; 4.4 Model fitting; 4.5 Scripts; 4.6 Checking convergence; 4.7 Spatial modelling: GeoBUGS; 4.8 Conclusions; 5 MLwiN basics; 5.1 About MLwiN; 5.2 Getting started; 5.3 Fitting statistical models; 5.4 MCMC estimation in MLwiN; 5.5 Spatial modelling; 5.6 Conclusions; 6 Relative risk estimation; 6.1 Relative risk estimation using WinBUGS 6.2 Spatial prediction 6.3 An analysis of the Ohio dataset using MLwiN; 7 Focused clustering: the analysis of putative health hazards; 7.1 Introduction; 7.2 Study design; 7.3 Problems of inference; 7.4 Modelling the hazard exposure risk; 7.5 Models for count data; 7.6 Bayesian models; 7.7 Focused clustering in WinBUGS; 7.8 Focused clustering in MLwiN; 8 Ecological analysis; 8.1 Introduction; 8.2 Statistical models; 8.3 WinBUGS analyses of ecological datasets; 8.4 MLwiN analyses of ecological datasets; 9 Spatially-correlated survival analysis; 9.1 Survival analysis in WinBUGS 9.2 Survival analysis in MLwiN 10 Epilogue; Appendix 1: WinBUGS code for focused clustering models; A.1 Falkirk example; A.2 Ohio example; Appendix 2: S-Plus function for conversion to GeoBUGS format; Bibliography; Index

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## Sommario/riassunto

Disease mapping involves the analysis of geo-referenced disease incidence data and has many applications, for example within resource allocation, cluster alarm analysis, and ecological studies. There is a real need amongst public health workers for simpler and more efficient tools for the analysis of geo-referenced disease incidence data. Bayesian and multilevel methods provide the required efficiency, and with the emergence of software packages - such as WinBUGS and MLwiN - are now easy to implement in practice. Provides an introduction to Bayesian and multilevel modelling in disease m

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2. Record Nr.	UNINA9910973855003321
Autore	Manna Zohar
Titolo	The Temporal Logic of Reactive and Concurrent Systems : Specification // by Zohar Manna, Amir Pnueli
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 1992
ISBN	1-4612-0931-5
Edizione	[1st ed. 1992.]
Descrizione fisica	1 online resource (XIV, 427 p.)
Disciplina	004.6
Soggetti	Computers, Special purpose Computer networks Computer science Special Purpose and Application-Based Systems Computer Communication Networks Computer Science Logic and Foundations of Programming
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	I: Models of Concurrency -- 1: Basic Models -- 2: Modeling Real Concurrency -- II: Specifications -- 3: Temporal Logic -- 4: Properties of Programs -- References -- Index to Symbols -- General Index.
Sommario/riassunto	Reactive systems are computing systems which are interactive, such as real-time systems, operating systems, concurrent systems, control systems, etc. They are among the most difficult computing systems to program. Temporal logic is a formal tool/language which yields excellent results in specifying reactive systems. This volume, the first of two, subtitled Specification, has a self-contained introduction to temporal logic and, more important, an introduction to the computational model for reactive programs, developed by Zohar Manna and Amir Pnueli of Stanford University and the Weizmann Institute of Science, Israel, respectively.