Statistical Methods in Spatial Epidemiology

Andrew B. Lawson
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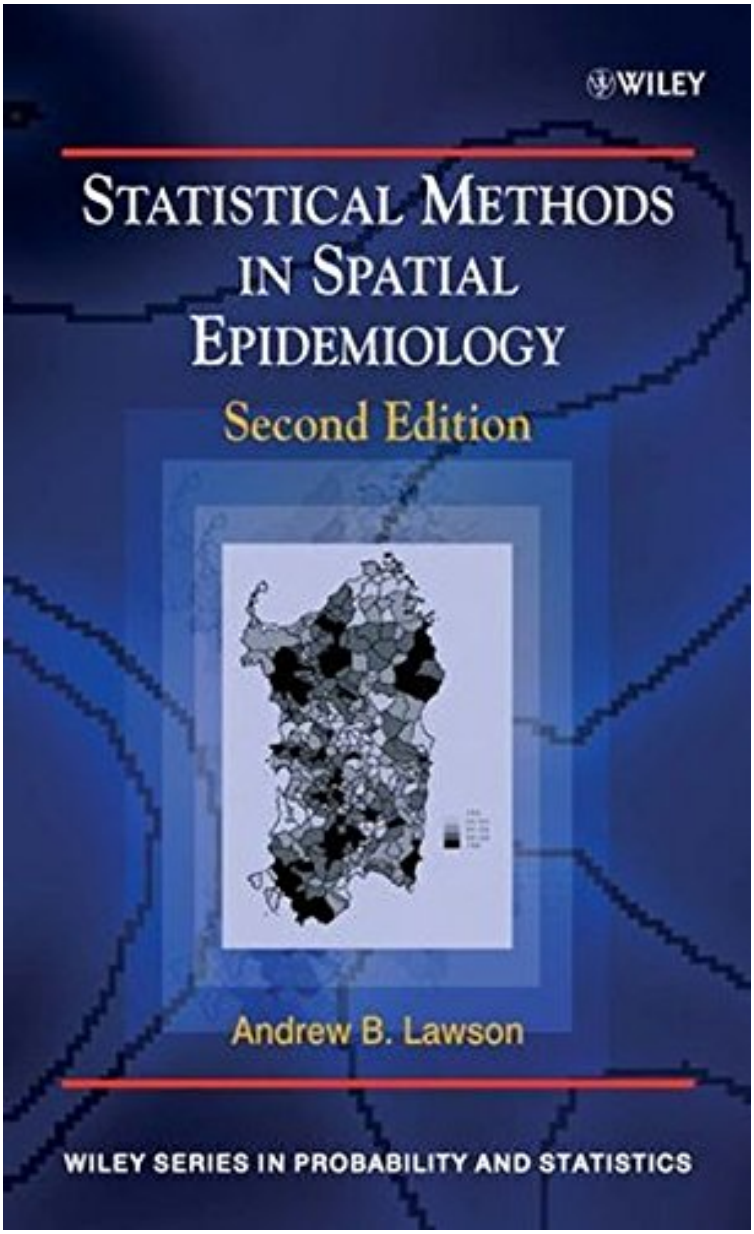

#2120623 in Books Andrew B Lawson 2006-06-16Original language:EnglishPDF # 1 9.30 x 1.20 x 6.30l, 1.58 #File Name: 0470014849424 pagesStatistical Methods in Spatial Epidemiology | File size: 73.Mb

Andrew B. Lawson : Statistical Methods in Spatial Epidemiology before purchasing it in order to gage whether or not it would be worth my time, and all praised Statistical Methods in Spatial Epidemiology:

9 of 14 people found the following review helpful. Great book very bad writingBy Frank H. MillardThis is a truly great book on this subject, but it is obvious that the text is mostly transcribed lecture or lab notes. The writing is so bad

(run on and fragments) that the publisher should have caught this, and should provide all of us who purchased the book a free revised and updated copy.But down to the real stuff. The author rightly critcizes the use of mapping rates by unit areas for to gain inference about disease patterns; and, provides some nifty insights into how important error modeling is; perhaps the book's real strong point. However, like most books on this subject, including the infamous Cressie, a huge assumption is made about the readers. Most public health people and epidemiologists have no clue about this area of analysis. Moreover, there needs to be a book where this stuff is presented so that most who would benefit could understand the subject matter.If you like run on and sentence fragments and especially finding out what defines a real disease cluster then get this book.

Spatial epidemiology is the description and analysis of the geographical distribution of disease. It is more important now than ever, with modern threats such as bio-terrorism making such analysis even more complex. This second edition of Statistical Methods in Spatial Epidemiology is updated and expanded to offer a complete coverage of the analysis and application of spatial statistical methods. The book is divided into two main sections: Part 1 introduces basic definitions and terminology, along with map construction and some basic models. This is expanded upon in Part II by applying this knowledge to the fundamental problems within spatial epidemiology, such as disease mapping, ecological analysis, disease clustering, bio-terrorism, space-time analysis, surveillance and infectious disease modelling. Provides a comprehensive overview of the main statistical methods used in spatial epidemiology. Updated to include a new emphasis on bio-terrorism and disease surveillance. Emphasizes the importance of space-time modelling and outlines the practical application of the method. Discusses the wide range of software available for analyzing spatial data, including WinBUGS, SaTScan and R, and features an accompanying website hosting related software. Contains numerous data sets, each representing a different approach to the analysis, and provides an insight into various modelling techniques. This text is primarily aimed at medical statisticians, researchers and practitioners from public health and epidemiology. It is also suitable for postgraduate students of statistics and epidemiology, as well professionals working in government agencies.

"the second edition is a substantial improvement on what was already a valuable, well structured and comprehensive reference" (Biometrics, September 2007)From the Back CoverSpatial epidemiology is the description and analysis of the geographical distribution of disease. It is more important now than ever, with modern threats such as bio-terrorism making such analysis even more complex. This second edition of Statistical Methods in Spatial Epidemiology is updated and expanded to offer a complete coverage of the analysis and application of spatial statistical methods. The book is divided into two main sections: Part 1 introduces basic definitions and terminology, along with map construction and some basic models. This is expanded upon in Part II by applying this knowledge to the fundamental problems within spatial epidemiology, such as disease mapping, ecological analysis, disease clustering, bio-terrorism, space-time analysis, surveillance and infectious disease modelling. Provides a comprehensive overview of the main statistical methods used in spatial epidemiology. Updated to include a new emphasis on bio-terrorism and disease surveillance. Emphasizes the importance of space-time modelling and outlines the practical application of the method. Discusses the wide range of software available for analyzing spatial data, including WinBUGS, SaTScan and R, and features an accompanying website hosting related software. Contains numerous data sets, each representing a different approach to the analysis, and provides an insight into various modelling techniques. This text is primarily aimed at medical statisticians, researchers and practitioners from public health and epidemiology. It is also suitable for postgraduate students of statistics and epidemiology, as well professionals working in government agencies.About the AuthorProfessor Andrew B. Lawsonis a respected and well-known academic. He has published many papers in leading journals, and a number of books on spatial statistics, including five for Wiley.