

Statistics for Spatial Data (Wiley Classics Library)

By Noel Cressie



Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie

The *Wiley Classics Library* consists of selected books that have been made more accessible to consumers in an effort to increase global appeal and general circulation. With these new unabridged softcover volumes, Wiley hopes to extend the lives of these works by making them available to future generations of statisticians, mathematicians, and scientists.

Spatial statistics — analyzing spatial data through statistical models — has proven exceptionally versatile, encompassing problems ranging from the microscopic to the astronomic. However, for the scientist and engineer faced only with scattered and uneven treatments of the subject in the scientific literature, learning how to make practical use of spatial statistics in day-to-day analytical work is very difficult.

Designed exclusively for scientists eager to tap into the enormous potential of this analytical tool and upgrade their range of technical skills, Statistics for Spatial Data is a comprehensive, single-source guide to both the theory and applied aspects of spatial statistical methods. The hard-cover edition was hailed by Mathematical Reviews as an "excellent book which will become a basic reference." This paper-back edition of the 1993 edition, is designed to meet the many technological challenges facing the scientist and engineer. Concentrating on the three areas of geostatistical data, lattice data, and point patterns, the book sheds light on the link between data and model, revealing how design, inference, and diagnostics are an outgrowth of that link. It then explores new methods to reveal just how spatial statistical models can be used to solve important problems in a host of areas in science and engineering.

Discussion includes:

- Exploratory spatial data analysis
- Spectral theory for stationary processes
- Spatial scale
- Simulation methods for spatial processes
- Spatial bootstrapping
- Statistical image analysis and remote sensing

- Computational aspects of model fitting
- Application of models to disease mapping

Designed to accommodate the practical needs of the professional, it features a unified and common notation for its subject as well as many detailed examples woven into the text, numerous illustrations (including graphs that illuminate the theory discussed) and over 1,000 references.

Fully balancing theory with applications, *Statistics for Spatial Data*, Revised Edition is an exceptionally clear guide on making optimal use of one of the ascendant analytical tools of the decade, one that has begun to capture the imagination of professionals in biology, earth science, civil, electrical, and agricultural engineering, geography, epidemiology, and ecology.

Download Statistics for Spatial Data (Wiley Classics Librar ...pdf

Read Online Statistics for Spatial Data (Wiley Classics Libr ...pdf

Statistics for Spatial Data (Wiley Classics Library)

By Noel Cressie

Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie

The *Wiley Classics Library* consists of selected books that have been made more accessible to consumers in an effort to increase global appeal and general circulation. With these new unabridged softcover volumes, Wiley hopes to extend the lives of these works by making them available to future generations of statisticians, mathematicians, and scientists.

Spatial statistics — analyzing spatial data through statistical models — has proven exceptionally versatile, encompassing problems ranging from the microscopic to the astronomic. However, for the scientist and engineer faced only with scattered and uneven treatments of the subject in the scientific literature, learning how to make practical use of spatial statistics in day-to-day analytical work is very difficult.

Designed exclusively for scientists eager to tap into the enormous potential of this analytical tool and upgrade their range of technical skills, Statistics for Spatial Data is a comprehensive, single-source guide to both the theory and applied aspects of spatial statistical methods. The hard-cover edition was hailed by Mathematical Reviews as an "excellent book which will become a basic reference." This paper-back edition of the 1993 edition, is designed to meet the many technological challenges facing the scientist and engineer. Concentrating on the three areas of geostatistical data, lattice data, and point patterns, the book sheds light on the link between data and model, revealing how design, inference, and diagnostics are an outgrowth of that link. It then explores new methods to reveal just how spatial statistical models can be used to solve important problems in a host of areas in science and engineering.

Discussion includes:

- Exploratory spatial data analysis
- Spectral theory for stationary processes
- Spatial scale
- Simulation methods for spatial processes
- Spatial bootstrapping
- Statistical image analysis and remote sensing
- Computational aspects of model fitting
- Application of models to disease mapping

Designed to accommodate the practical needs of the professional, it features a unified and common notation for its subject as well as many detailed examples woven into the text, numerous illustrations (including graphs that illuminate the theory discussed) and over 1,000 references.

Fully balancing theory with applications, *Statistics for Spatial Data*, Revised Edition is an exceptionally clear guide on making optimal use of one of the ascendant analytical tools of the decade, one that has begun to capture the imagination of professionals in biology, earth science, civil, electrical, and agricultural engineering, geography, epidemiology, and ecology.

Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie Bibliography

- Sales Rank: #1142604 in Books
- Published on: 2015-07-27
- Original language: English
- Number of items: 1
- Dimensions: 9.20" h x 1.70" w x 6.00" l, 2.84 pounds
- Binding: Paperback
- 928 pages

Download Statistics for Spatial Data (Wiley Classics Librar ...pdf

Read Online Statistics for Spatial Data (Wiley Classics Libr ...pdf

Editorial Review

Review

"This is the second edition of the leading text on the characterization and analysis of data collected at different points of space. It was written as the text for a course, but it also serves as an encyclopedic guide to the subject. It is aimed primarily at scientists and engineers. The author sees his task as "taking the diverse and uneven literature on spatial statistics and extending it, correcting it and unifying it"." (Mathematical Association of America 2016)

From the Inside Flap

Spatial statistics-analyzing spatial data through statistical models-has proven exceptionally versatile, encompassing problems ranging from the microscopic to the astronomic. However, for the scientist and engineer faced only with scattered and uneven treatments of the subject in the scientific literature, learning how to make practical use of spatial statistics in day-to-day analytical work has approached the impossible. Designed exclusively for the scientist eager to tap into the enormous potential of this analytical tool and upgrade his range of technical skills, Statistics for Spatial Data is a comprehensive, single-source guide to both the theory and applied aspects of current spatial statistical methods. The previous edition was hailed by Mathematical Reviews as an "excellent book which.will become a basic reference." This revised edition, an update of the 1991 edition, has been designed to meet the many technological challenges facing the scientist and engineer today. Concentrating on the three areas of geostatistical data, lattice data, and point patterns, the book sheds light on the link between data and model, revealing how design, inference, and diagnostics are an outgrowth of that link. It then explores new methods to reveal just how spatial statistical models can be used to solve important problems in a host of areas in science and engineering. Discussion includes:

- * Exploratory spatial data analysis
- * Spectral theory for stationary processes
- * Spatial scale
- * Simulation methods for spatial processes
- * Spatial bootstrapping
- * Statistical image analysis and remote sensing
- * Computational aspects of model fitting
- * Application of models to disease mapping

Including material heretofore unavailable in book form, the book is unique in its emphasis on Markov random fields in its presentation of models for spatial lattice data. Designed to accommodate the practical needs of the professional, it also features the first unified and common notation for its subject as well as many detailed examples woven into the text, numerous illustrations (including graphs which illuminate the theory discussed) and over 1,000 references. Fully balancing theory with applications, Statistics for Spatial Data is an exceptionally clear guide on making optimal use of one of the ascendant analytical tools of the decade, one that has begun to capture the imagination of professionals in biology, earth science, civil, electrical, and agricultural engineering, geography, epidemiology, and ecology.

From the Back Cover

The first practical look at spatial statistics for the scientist and engineer. Designed for the scientific and engineering professional eager to exploit its enormous potential, Statistics for Spatial Data is a primer to the theory as well as the nuts-and-bolts of this influential technique. Focusing on the three areas of geostatistical data, lattice data, and point patterns, the book sheds light on the link between data and model, and reveals how spatial statistical models can be used to solve a host of problems in science and engineering. Revised to reflect state-of-the-art developments, this edition also features many detailed examples, numerous

illustrations, and over 1,000 references. The first fully comprehensive introduction, Statistics for Spatial Data is an essential guide for professionals in biology, earth science, civil, electrical, and agricultural engineering, geography, epidemiology, and ecology. "This excellent book, which presents the most important branches of modern spatial statistics in an exemplary manner, will become a basic reference book and will popularize many methods which have been used until now only by small circles of specialists." -Mathematical Reviews "The majority of geoscientists should make sure they have access to this volume, while for those who are actively involved in applying statistical methods to data (of all sorts) this book should be in their personal libraries. As a compendium of statistical procedures to use to analyze data, this volume will surely provide a good solid framework for some time to come." -Geophysics

Users Review

From reader reviews:

Betty Benner:

Why don't make it to be your habit? Right now, try to ready your time to do the important act, like looking for your favorite reserve and reading a e-book. Beside you can solve your problem; you can add your knowledge by the guide entitled Statistics for Spatial Data (Wiley Classics Library). Try to stumble through book Statistics for Spatial Data (Wiley Classics Library) as your good friend. It means that it can for being your friend when you truly feel alone and beside associated with course make you smarter than ever. Yeah, it is very fortuned in your case. The book makes you more confidence because you can know almost everything by the book. So , let us make new experience as well as knowledge with this book.

William Pak:

This Statistics for Spatial Data (Wiley Classics Library) book is not really ordinary book, you have after that it the world is in your hands. The benefit you obtain by reading this book is information inside this reserve incredible fresh, you will get information which is getting deeper an individual read a lot of information you will get. This specific Statistics for Spatial Data (Wiley Classics Library) without we recognize teach the one who studying it become critical in considering and analyzing. Don't become worry Statistics for Spatial Data (Wiley Classics Library) can bring any time you are and not make your tote space or bookshelves' come to be full because you can have it inside your lovely laptop even cellphone. This Statistics for Spatial Data (Wiley Classics Library) having fine arrangement in word in addition to layout, so you will not feel uninterested in reading.

Edna Spalding:

Is it an individual who having spare time in that case spend it whole day by simply watching television programs or just telling lies on the bed? Do you need something new? This Statistics for Spatial Data (Wiley Classics Library) can be the solution, oh how comes? A fresh book you know. You are and so out of date, spending your extra time by reading in this brand-new era is common not a nerd activity. So what these textbooks have than the others?

Luis Hahn:

Don't be worry when you are afraid that this book will certainly filled the space in your house, you will get it in e-book approach, more simple and reachable. That Statistics for Spatial Data (Wiley Classics Library) can give you a lot of pals because by you investigating this one book you have issue that they don't and make anyone more like an interesting person. This particular book can be one of one step for you to get success. This publication offer you information that perhaps your friend doesn't recognize, by knowing more than different make you to be great people. So , why hesitate? Let me have Statistics for Spatial Data (Wiley Classics Library).

Download and Read Online Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie #KPR5ZXG783M

Read Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie for online ebook

Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie books to read online.

Online Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie ebook PDF download

Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie Doc

Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie Mobipocket

Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie EPub

KPR5ZXG783M: Statistics for Spatial Data (Wiley Classics Library) By Noel Cressie