



Applied Spatial Statistics for Public Health Data

By Lance A. Waller, Carol A. Gotway

Download now

Read Online ➔

Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway

An application-based introduction to the statistical analysis of spatially referenced health data

Sparked by the growing interest in statistical methods for the analysis of spatially referenced data in the field of public health, *Applied Spatial Statistics for Public Health Data* fills the need for an introductory, application-oriented text on this timely subject. Written for practicing public health researchers as well as graduate students in related fields, the text provides a thorough introduction to basic concepts and methods in applied spatial statistics as well as a detailed treatment of some of the more recent methods in spatial statistics useful for public health studies that have not been previously covered elsewhere.

Assuming minimal knowledge of spatial statistics, the authors provide important statistical approaches for assessing such questions as:

- Are newly occurring cases of a disease "clustered" in space?
- Do the cases cluster around suspected sources of increased risk, such as toxic waste sites or other environmental hazards?
- How do we take monitored pollution concentrations measured at specific locations and interpolate them to locations where no measurements were taken?
- How do we quantify associations between local disease rates and local exposures?
- After reviewing traditional statistical methods used in public health research, the text provides an overview of the basic features of spatial data, illustrates various geographic mapping and visualization tools, and describes the sources of publicly available spatial data that might be useful in public health applications.

↓ [Download Applied Spatial Statistics for Public Health Data ...pdf](#)

📖 [Read Online Applied Spatial Statistics for Public Health Dat ...pdf](#)

Applied Spatial Statistics for Public Health Data

By Lance A. Waller, Carol A. Gotway

Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway

An application-based introduction to the statistical analysis of spatially referenced health data

Sparked by the growing interest in statistical methods for the analysis of spatially referenced data in the field of public health, *Applied Spatial Statistics for Public Health Data* fills the need for an introductory, application-oriented text on this timely subject. Written for practicing public health researchers as well as graduate students in related fields, the text provides a thorough introduction to basic concepts and methods in applied spatial statistics as well as a detailed treatment of some of the more recent methods in spatial statistics useful for public health studies that have not been previously covered elsewhere.

Assuming minimal knowledge of spatial statistics, the authors provide important statistical approaches for assessing such questions as:

- Are newly occurring cases of a disease "clustered" in space?
- Do the cases cluster around suspected sources of increased risk, such as toxic waste sites or other environmental hazards?
- How do we take monitored pollution concentrations measured at specific locations and interpolate them to locations where no measurements were taken?
- How do we quantify associations between local disease rates and local exposures?
- After reviewing traditional statistical methods used in public health research, the text provides an overview of the basic features of spatial data, illustrates various geographic mapping and visualization tools, and describes the sources of publicly available spatial data that might be useful in public health applications.

Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway Bibliography

- Sales Rank: #1125464 in Books
- Published on: 2004-07-15
- Original language: English
- Number of items: 1
- Dimensions: 9.60" h x 1.32" w x 6.50" l, 1.87 pounds
- Binding: Hardcover
- 520 pages

 [Download Applied Spatial Statistics for Public Health Data ...pdf](#)

 [Read Online Applied Spatial Statistics for Public Health Dat ...pdf](#)

Editorial Review

Review

"...a fine textbook for a course on spatial statistics...easy to follow and agreeable to read...an excellent introduction and overview..." (*Statistics in Medical Research*, August 2006)

"...will be a successful addition to existing literature and foster the application of spatial statistical methods to topics in epidemiology and public health." (*Biometrics*, December 2005)

"...an interesting and worthwhile read for all practitioners of spatial statistics." (*Computers & Geosciences*, July 2005)

"...I am pleased to add it to my collection and feel sure that it will be widely read and appreciated." (*Journal of the American Statistical Association*, June 2005)

From the Back Cover

An application-based introduction to the statistical analysis of spatially referenced health data

Sparked by the growing interest in statistical methods for the analysis of spatially referenced data in the field of public health, *Applied Spatial Statistics for Public Health Data* fills the need for an introductory, application-oriented text on this timely subject. Written for practicing public health researchers as well as graduate students in related fields, the text provides a thorough introduction to basic concepts and methods in applied spatial statistics as well as a detailed treatment of some of the more recent methods in spatial statistics useful for public health studies that have not been previously covered elsewhere.

Assuming minimal knowledge of spatial statistics, the authors provide important statistical approaches for assessing such questions as:

- Are newly occurring cases of a disease "clustered" in space?
- Do the cases cluster around suspected sources of increased risk, such as toxic waste sites or other environmental hazards?
- How do we take monitored pollution concentrations measured at specific locations and interpolate them to locations where no measurements were taken?
- How do we quantify associations between local disease rates and local exposures?
- After reviewing traditional statistical methods used in public health research, the text provides an overview of the basic features of spatial data, illustrates various geographic mapping and visualization tools, and describes the sources of publicly available spatial data that might be useful in public health applications.

About the Author

LANCE A. WALLER, PhD, is an associate professor in the Department of Biostatistics at Emory University in Atlanta, Georgia. He received his PhD in Operations Research in 1992 from Cornell University. Dr. Waller was named Student Government Professor of the Year in 2003 by the Rollins School of Public Health, Emory University, and is a Fellow of the American Statistical Association.

CAROL A. GOTWAY, PhD, is a mathematical statistician for the National Center for Environmental

Health and an adjunct associate professor in the Department of Biostatistics at Emory University. She received her PhD in Statistics from Iowa State University in 1989. Dr. Gotway was awarded a Distinguished Achievement Medal by the American Statistical Association's Section on Statistics and the Environment for her contributions to environmental statistics and is also a Fellow of the American Statistical Association.

Users Review

From reader reviews:

Christopher Jaeger:

What do you in relation to book? It is not important together with you? Or just adding material when you want something to explain what yours problem? How about your time? Or are you busy person? If you don't have spare time to accomplish others business, it is gives you the sense of being bored faster. And you have spare time? What did you do? Everyone has many questions above. They have to answer that question simply because just their can do which. It said that about e-book. Book is familiar in each person. Yes, it is right. Because start from on guardería until university need this kind of Applied Spatial Statistics for Public Health Data to read.

Mike Edwards:

Your reading sixth sense will not betray anyone, why because this Applied Spatial Statistics for Public Health Data publication written by well-known writer we are excited for well how to make book that can be understand by anyone who read the book. Written with good manner for you, leaking every ideas and writing skill only for eliminate your own personal hunger then you still hesitation Applied Spatial Statistics for Public Health Data as good book not merely by the cover but also by content. This is one guide that can break don't judge book by its include, so do you still needing one more sixth sense to pick that!? Oh come on your studying sixth sense already said so why you have to listening to one more sixth sense.

Kari Hughes:

A lot of reserve has printed but it differs. You can get it by internet on social media. You can choose the best book for you, science, amusing, novel, or whatever through searching from it. It is known as of book Applied Spatial Statistics for Public Health Data. You can contribute your knowledge by it. Without making the printed book, it could possibly add your knowledge and make a person happier to read. It is most critical that, you must aware about book. It can bring you from one location to other place.

Yong Dickerson:

Some individuals said that they feel bored stiff when they reading a book. They are directly felt the item when they get a half portions of the book. You can choose the book Applied Spatial Statistics for Public Health Data to make your current reading is interesting. Your personal skill of reading proficiency is developing when you like reading. Try to choose simple book to make you enjoy to learn it and mingle the sensation about book and studying especially. It is to be initially opinion for you to like to wide open a book and study it. Beside that the book Applied Spatial Statistics for Public Health Data can to be your brand new

friend when you're feel alone and confuse with the information must you're doing of the time.

**Download and Read Online Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway
#U3DF2MGZB7W**

Read Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway for online ebook

Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway 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 Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway books to read online.

Online Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway ebook PDF download

Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway Doc

Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway Mobipocket

Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway EPub

U3DF2MGZB7W: Applied Spatial Statistics for Public Health Data By Lance A. Waller, Carol A. Gotway