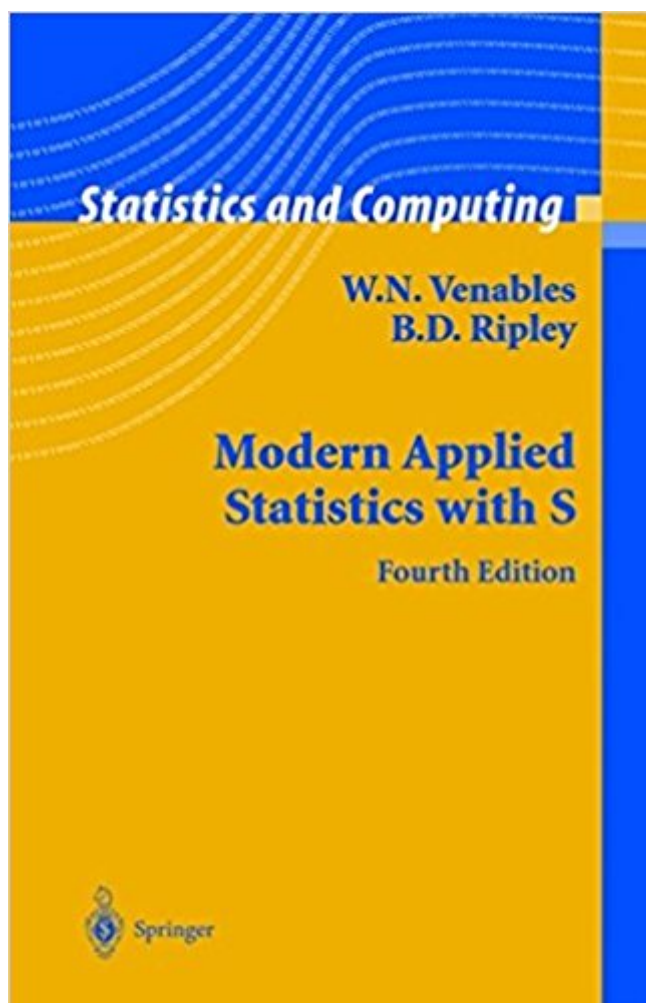The book was found

# Modern Applied Statistics With S (Statistics And Computing)

## Synopsis

A guide to using S environments to perform statistical analyses providing both an introduction to the use of S and a course in modern statistical methods. The emphasis is on presenting practical problems and full analyses of real data sets.

## Book Information

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## Customer Reviews

"Modern Applied Statistics With S meets its goal of serving as an introduction to S for new users, as well as a reference and resource for those with more S experience." Journal of the American Statistical Association, December 2005

S is a powerful environment for the statistical and graphical analysis of data. It provides the tools to implement many statistical ideas that have been made possible by the widespread availability of workstations having good graphics and computational capabilities. This book is a guide to using S environments to perform statistical analyses and provides both an introduction to the use of S and a course in modern statistical methods. Implementations of S are available commercially in S-PLUS(R) workstations and as the Open Source R for a wide range of computer systems. The aim of this book is to show how to use S as a powerful and graphical data analysis system. Readers are assumed to have a basic grounding in statistics, and so the book is intended for would-be users of S-PLUS or R and both students and researchers using statistics. Throughout, the emphasis is on

presenting practical problems and full analyses of real data sets. Many of the methods discussed are state of the art approaches to topics such as linear, nonlinear and smooth regression models, tree-based methods, multivariate analysis, pattern recognition, survival analysis, time series and spatial statistics. Throughout modern techniques such as robust methods, non-parametric smoothing and bootstrapping are used where appropriate. This fourth edition is intended for users of S-PLUS 6.0 or R 1.5.0 or later. A substantial change from the third edition is updating for the current versions of S-PLUS and adding coverage of R. The introductory material has been rewritten to emphasis the import, export and manipulation of data. Increased computational power allows even more computer-intensive methods to be used, and methods such as GLMMs,

The printed book (which I own) deserves 5 stars as a comprehensive introduction to the S/R language and statistics.The one star concerns explicitly the Kindle edition. In short: The rendering of formula and even (plain text!) S/R code is a scandal.Formula and S/R code are included as bad resolution pictures and NOT rendered professionally in HTML5. They appear in pale grey and cannot be zoomed!Springer has demonstrated with another Kindle book I purchased (Bapat RB: Linear Algebra and Linear Models) that they are capable of producing a professional Kindle version.I purchased the Kindle edition in addition to the printed one, just to have it around when I need to look things up.The same issue is valid for the Springer Kindle versions of:Dalgaard P: Introductory Statistics with RZuur AF et al: Mixed Effects Models and Extensions in Ecology with RI will repeat this statement in reviews for the above mentioned books.When I have found out how to contact costumer service at Springer I will formally demand a refund or an update.Do not buy the Kindle edition.

I started using R to do linear modeling and found that I was using 'library(MASS)' much of the time. MASS, it turns out, stands for Modern Applied Statistics with S. R is a free ware version of S-Plus. I assumed that R is simply S-Plus without the GUI. I was close, but not right. There are some minor differences. This book, written for S also addresses the use of R in the applications presented, and also notes differences between the two, when they exist. I am quite pleased with Venerables and Ripley's book; it presents much of the theoretical background as well as 'command line' code for doing the analyses presented in each chapter. The book assumes the reader has some background in statistics.The first five chapters are a brief overview of /introduction to S-Plus (or R). These chapters present enough information and examples to make the rest of the book fairly easy to work through.I got the book primarily to work design of experiments. The chapters on linear statistical

models and general linear models were perfectly suited to my needs. Topics like factorial experiments, random and mixed effects, nested designs, partially balanced designs are covered. In addition, techniques of robust analysis and bootstrap methods are presented.The book covers many other areas - non-linear models, classification, time series, optimization.. I have not worked through any of these topics in the book.Overall I find Modern Applied Statistics with S to be an excellent book, invaluable if one is using R (I don't have S-Plus) as the vehicle for analyses.

This is *the* book to have on S+/R. It provides excellent value for its price (indeed, any price): it is concise, broad, informative. All the same, I think it would be useful to identify intended audience for this book (in my view). First, the book is not for novices in Statistics. You'll learn how to fit generalized linear models in the language, not how and why to apply such models properly. To this end, there are plenty of specific monographies, and the majority of them use R for examples. Just to name a few, Friedman, Hastie, Tibshirani, Harrell, Faraway employ R. Also, this book assume some basic knowledge of programming. R is a more elegant language than Matlab and Thinking in R becomes very natural after some practice. But I have not seen so far a tutorial on "R as a first language". Summing up, this is a great book for undergraduates in Statistics/Engineering and up, who want a comprehensive, usable reference. My only criticism is that since 2002 there have been giant changes in the language. First, R is now the main implementation of the language, with S+ being an industry-supported variant. Second, the S4 object model is here to stay and grow, and is crying for a user-friendly introduction. Lastly, the number of packages is probably twenty times what it was in 2002. SVMs, ensemble methods, shrinkage, sparse representations *are* modern applied statistics, and are underrepresented in the book.Still, this is a must have for any applied statistician.

Who is the books audience? Its a second book. A second book to a theory book. A second book to a textbook. A second book to a your lecture notes. It will never be ~the~ book for a topic by itself, but it just a brilliant job of filling gaps.I picture it like this: if your going into a graduate program that uses R buy this book and you will use it. 2 out of 3 courses I took in spring semester used R heavily. I am surprised none of the instructors had the line "Recommended for students continuing in R is MASS..." in their syllabus. Because that is exactly what I would say. This is one of those books you want to get early, and keep it around.It never explains enough of the statistics to stand on its own; however, its coverage of R and R packages is more complete than anything I have found elsewhere. And having got it a year after I first started using R, I am sad I didn't get it sooner =)~If you're changing topics alot like a student does is it ~the~ desk reference for R? Probably. Maybe I

will run into a better one in a few months though? I dunno.. you get it and tell me.

Modern Applied Statistics with S (Statistics and Computing) Biomedical Statistics with Computing (Medical Computing Series) Statistics for People Who (Think They) Hate Statistics (Salkind, Statistics for People Who(Think They Hate Statistics(Without CD)) Computational Statistics (Statistics and Computing) Introductory Statistics with R (Statistics and Computing) Programmed Inequality: How Britain Discarded Women Technologists and Lost Its Edge in Computing (History of Computing) Applied Bayesian Statistics: With R and OpenBUGS Examples (Springer Texts in Statistics) Environmental and Ecological Statistics with R, Second Edition (Chapman & Hall/CRC Applied Environmental Statistics) Elementary Fluid Dynamics (Oxford Applied Mathematics and Computing Science Series) Numerical Analysis: Mathematics of Scientific Computing (The Sally Series; Pure and Applied Undergraduate Texts, Vol. 2) Numerical Solution of Partial Differential Equations: Finite Difference Methods (Oxford Applied Mathematics and Computing Science Series) An Introduction to Scientific Computing: Twelve Computational Projects Solved with MATLAB (Texts in Applied Mathematics) Concurrent Scientific Computing (Texts in Applied Mathematics) Introduction to Probability and Statistics: Principles and Applications for Engineering and the Computing Sciences The Grammar of Graphics (Statistics and Computing) African Fractals: Modern Computing and Indigenous Design Modern Essentials Bundle 6th - Modern Essentials 6th Edition a Contemporary Guide to the Therapeutic Use of Essential Oils, An Introduction to Modern Essentials, and Modern Essentials Reference Card Differential Equations and Their Applications: An Introduction to Applied Mathematics (Texts in Applied Mathematics) (v. 11) Applied Functional Analysis: Main Principles and Their Applications (Applied Mathematical Sciences) Principles of Mathematical Analysis (International Series in Pure and Applied Mathematics) (International Series in Pure & Applied Mathematics)