

# Data Analysis: Statistical and Computational Methods for Scientists and Engineers

Siegmund Brandt

Download now

Click here if your download doesn"t start automatically

## Data Analysis: Statistical and Computational Methods for Scientists and Engineers

Siegmund Brandt

Data Analysis: Statistical and Computational Methods for Scientists and Engineers Siegmund Brandt

The fourth edition of this successful textbook presents a comprehensive introduction to statistical and numerical methods for the evaluation of empirical and experimental data. Equal weight is given to statistical theory and practical problems. The concise mathematical treatment of the subject matter is illustrated by many examples and for the present edition a library of Java programs has been developed. It comprises methods of numerical data analysis and graphical representation as well as many example programs and solutions to programming problems. The programs (source code, Java classes and documentation) and extensive appendices to the main text are available for free download from the book's page at www.springer.com.

#### **Contents**

- Probabilities, Random variables,
- Random numbers and the Monte Carlo Method.
- Statistical distributions (binomial, Gauss, Poisson). Samples. Statistical tests.
- Maximum Likelihood. Least Squares. Regression. Minimization.
- Analysis of Variance. Time series analysis.

#### Audience

The book is conceived both as an introduction and as a work of reference. In particular it addresses itself to students, scientists and practitioners in science and engineering as a help in the analysis of their data

- in laboratory courses,
- in working for bachelor or master degrees,
- in thesis work,
- in research and professional work.

"The book is concise, but gives a sufficiently rigorous mathematical treatment of practical statistical methods for data analysis; it can be of great use to all who are involved with data analysis." Physicalia

"...Serves as a nice reference guide for any scientist interested in the fundamentals of data analysis on the computer." The American Statistician

"This lively and erudite treatise covers the theory of the main statistical tools and their practical applications...a first rate university textbook, and good background material for the practicing physicist." Physics Bulletin

#### The Author

Siegmund Brandt is Emeritus Professor of Physics at the University of Siegen. With his group he worked on experiments in elementary-particle physics at the research centers DESY in Hamburg and CERN in Geneva in which the analysis of the experimental data plays an important role. He is author or coauthor of textbooks

which have appeared in ten languages.



**Download** Data Analysis: Statistical and Computational Metho ...pdf



Read Online Data Analysis: Statistical and Computational Met ...pdf

Download and Read Free Online Data Analysis: Statistical and Computational Methods for Scientists and Engineers Siegmund Brandt

#### From reader reviews:

#### **Phyllis Kelly:**

Book is to be different for each and every grade. Book for children till adult are different content. As you may know that book is very important for us. The book Data Analysis: Statistical and Computational Methods for Scientists and Engineers ended up being making you to know about other information and of course you can take more information. It is very advantages for you. The e-book Data Analysis: Statistical and Computational Methods for Scientists and Engineers is not only giving you more new information but also for being your friend when you sense bored. You can spend your own personal spend time to read your book. Try to make relationship with the book Data Analysis: Statistical and Computational Methods for Scientists and Engineers. You never experience lose out for everything in the event you read some books.

#### **Frances Small:**

Do you considered one of people who can't read satisfying if the sentence chained within the straightway, hold on guys this kind of aren't like that. This Data Analysis: Statistical and Computational Methods for Scientists and Engineers book is readable by you who hate those straight word style. You will find the info here are arrange for enjoyable reading experience without leaving also decrease the knowledge that want to provide to you. The writer connected with Data Analysis: Statistical and Computational Methods for Scientists and Engineers content conveys prospect easily to understand by a lot of people. The printed and e-book are not different in the information but it just different in the form of it. So, do you nonetheless thinking Data Analysis: Statistical and Computational Methods for Scientists and Engineers is not loveable to be your top collection reading book?

#### Jolie Browne:

The guide with title Data Analysis: Statistical and Computational Methods for Scientists and Engineers contains a lot of information that you can discover it. You can get a lot of gain after read this book. That book exist new expertise the information that exist in this guide represented the condition of the world at this point. That is important to yo7u to be aware of how the improvement of the world. This specific book will bring you in new era of the internationalization. You can read the e-book on the smart phone, so you can read this anywhere you want.

#### **Ezra Talbott:**

Are you kind of stressful person, only have 10 or perhaps 15 minute in your morning to upgrading your mind skill or thinking skill perhaps analytical thinking? Then you are having problem with the book when compared with can satisfy your short time to read it because all of this time you only find reserve that need more time to be learn. Data Analysis: Statistical and Computational Methods for Scientists and Engineers can be your answer given it can be read by anyone who have those short extra time problems.

Download and Read Online Data Analysis: Statistical and Computational Methods for Scientists and Engineers Siegmund Brandt #0LYRGVZMXNW

### Read Data Analysis: Statistical and Computational Methods for Scientists and Engineers by Siegmund Brandt for online ebook

Data Analysis: Statistical and Computational Methods for Scientists and Engineers by Siegmund Brandt 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 Data Analysis: Statistical and Computational Methods for Scientists and Engineers by Siegmund Brandt books to read online.

### Online Data Analysis: Statistical and Computational Methods for Scientists and Engineers by Siegmund Brandt ebook PDF download

Data Analysis: Statistical and Computational Methods for Scientists and Engineers by Siegmund Brandt Doc

Data Analysis: Statistical and Computational Methods for Scientists and Engineers by Siegmund Brandt Mobipocket

Data Analysis: Statistical and Computational Methods for Scientists and Engineers by Siegmund Brandt EPub