



# 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](http://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:**

#### **Diane Walker:**

Book is to be different for each grade. Book for children right up until adult are different content. As we know that book is very important normally. The book Data Analysis: Statistical and Computational Methods for Scientists and Engineers seemed to be making you to know about other know-how and of course you can take more information. It is quite advantages for you. The guide Data Analysis: Statistical and Computational Methods for Scientists and Engineers is not only giving you more new information but also to become your friend when you sense bored. You can spend your own spend time to read your publication. Try to make relationship using the book Data Analysis: Statistical and Computational Methods for Scientists and Engineers. You never truly feel lose out for everything if you read some books.

#### **Terry Klatt:**

Spent a free time for you to be fun activity to accomplish! A lot of people spent their free time with their family, or their own friends. Usually they carrying out activity like watching television, planning to beach, or picnic inside park. They actually doing same task every week. Do you feel it? Will you something different to fill your own personal free time/ holiday? Might be reading a book could be option to fill your free time/ holiday. The first thing that you will ask may be what kinds of publication that you should read. If you want to consider look for book, may be the publication untitled Data Analysis: Statistical and Computational Methods for Scientists and Engineers can be fine book to read. May be it may be best activity to you.

#### **Juli Gadberry:**

People live in this new day time of lifestyle always try to and must have the spare time or they will get large amount of stress from both way of life and work. So , when we ask do people have time, we will say absolutely indeed. People is human not only a robot. Then we consult again, what kind of activity have you got when the spare time coming to an individual of course your answer may unlimited right. Then ever try this one, reading textbooks. It can be your alternative in spending your spare time, the actual book you have read will be Data Analysis: Statistical and Computational Methods for Scientists and Engineers.

#### **Ronald Marinelli:**

Do you really one of the book lovers? If yes, do you ever feeling doubt if you find yourself in the book store? Make an effort to pick one book that you find out the inside because don't judge book by its protect may doesn't work at this point is difficult job because you are scared that the inside maybe not while fantastic as in the outside appearance likes. Maybe you answer may be Data Analysis: Statistical and Computational Methods for Scientists and Engineers why because the fantastic cover that make you consider concerning the content will not disappoint a person. The inside or content is fantastic as the outside or cover. Your reading 6th sense will directly guide you to pick up this book.

**Download and Read Online Data Analysis: Statistical and  
Computational Methods for Scientists and Engineers Siegmund  
Brandt #6AZ2TCS08FU**

## **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**