

CHAPTER 2

2. Help and documentation

2.1 Online documentation

Installing S-PLUS includes installing a number of online manuals on your hard disk:

- 1) Getting started, a short introduction to S-PLUS
- 2) User's Guide, a detailed description of the graphical user interface of S-PLUS
- 3) Programmer's Guide, an overview of the programming language
- 4) Guide to Statistics Vol. 1, a description of the statistical techniques in S-PLUS
- 5) Guide to Statistics Vol. 2, a description of the statistical techniques in S-PLUS
- 6) LME for SAS PROC MIXED users, an overview of the differences between LME in S-PLUS and PROC MIXED in SAS
- 7) Robust library
- 8) Missing data analysis library

To access these manuals choose **Help? Online Manuals**. To open these files you need Acrobat Reader.

2.2 Online help information

S-PLUS contains several types of online help. The main help is available through the **Help** menu. In this menu you'll also find links to some useful websites. And finally, each dialog in S-PLUS contains a help button leading to context sensitive Help.

2.3 Books

The following books are recommended reading material. They give a good, detailed description of the many capabilities of S and S-PLUS.

Modern Applied Statistics with S-PLUS
W.N. Venables and B.D. Ripley
Springer, 1999 third edition

S Programming
W.N. Venables and B.D. Ripley
Springer, 2000

The first book not only gives an overview of how to use S-PLUS, but also describes many statistical methods in S-PLUS. The second book is a companion book of the first book and gives a detailed description of the ‘advanced’ programming topics in S.

The developers of the survival analysis routines and mixed effects models in S-PLUS have written books, which give a very good overview and details of the theoretical and practical details.

Modeling Survival Data

Terry M. Therneau and Patricia M. Grambsch
Springer (2000)

Mixed effects models in S and S-PLUS

Jose Pinheiro and Douglas Bates
Springer (2000)

Other related S-PLUS books are:

Regression Modeling Strategies

Frank E. Harrel, Jr.
Springer (2001)
ISBN 0-387-95232-2

Applied Wavelet Analysis with S-PLUS

Andrew Bruce and Hong-Ye Gao
Springer-Verlag, New York, NY (1996)
ISBN 0-387-94714-0

An Introduction to the Bootstrap

Bradley Efron and Robert Tibshirani
Chapman and Hall (1994)
ISBN 0-412-04231-2

A Handbook of Statistical Analyses Using S-PLUS

B. Everitt
Chapman and Hall, London (1994)
ISBN 0-412-56310-X

Smoothing Techniques with Implementation in S

W. Härdle
Springer-Verlag, New York (1991)

Generalized Additive Models

T. Hastie and R. Tibshirani
Chapman and Hall (1990)

Statistical Tools for Nonlinear Regression:

A Practical Guide with S-PLUS Examples
S. Huet, A. Bouvier, M.-A. Gruet, and E. Joliet
Springer-Verlag, New York, NY (1996)

S+SpatialStats User's Manual

S.P. Kaluzny, S.C. Vega, T.P. Cardoso, and A.A. Shelly
Springer-Verlag, New York, NY (1997)

Algorithms, Routines and S Functions for Robust Statistics

A. Marazzi
Wadsworth and Brooks/Cole, Pacific Grove, CA (1993)

EnvironmentalStats for S-PLUS

Steve Millard
User's Manual for Windows and UNIX

Modern Applied Biostatistical Methods Using S-PLUS

S. Selvin
Oxford University Press (1998)
ISBN 0-19-512025-6

Introduction to Robust Estimation and Hypothesis Testing

R. Wilcox
Academic Press (1997)
ISBN 0-12-751545-3

Applied Smoothing Techniques for Data Analysis:

The Kernel Approach with S-PLUS Illustrations
Bowman & Azzalini
Claredon Press (1997)
ISBN 0-19-852396-3

Statistical Methods for Reliability Data

W. Meeker and L. Escobar
John Wiley & Sons, Inc. (1998)
ISBN 0-471-14328-6

Visualizing Data

William S. Cleveland
Hobart Press, Summit, NJ (1993)
ISBN 0-9634884-0-6

2.4 Resources on the web

StatLib

Statlib is a system for the distribution of statistical routines, data sets and other statistical information on the internet. It contains a large collection of S-PLUS functions and libraries written by S-PLUS users. You will find statlib at:

<http://lib.stat.cmu.edu/>

S-News

S-News is an electronic mailing list for S-PLUS users from all over the world to ask S-PLUS related questions and share information. Even if you don't have questions for this mailing list it can be (very) instructive (and amusing) to follow the discussions. To subscribe, send an email to

s-news-request@wubios.wustl.edu

with the text `subscribe` in the body of the mail. To unsubscribe, send a mail to the same address with the text `unsubscribe` in the mail. Look at <http://www.biostat.wustl.edu/s-news/> for more details. There is even a Dutch S-PLUS user's group. Go to

<http://www.candiensten.nl/s+gebruikersgroep>

Service Releases

Advanced software systems as a rule contain a bug or two, and S-PLUS is no exception. From time to time insightful will provide service releases. Make sure you have the latest service release. Go to the **Help** menu in S-PLUS and select 'Update S-PLUS' to check if you have the latest update.

