

**A Handbook of Statistical Analyses
Using R — 2nd Edition**

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Preface to Second Edition

Like the first edition this book is intended as a guide to data analysis with the R system for statistical computing. New chapters on graphical displays, generalised additive models and simultaneous inference have been added to this second edition and a section on generalised linear mixed models completes the chapter that discusses the analysis of longitudinal data where the response variable does not have a normal distribution. In addition, new examples and additional exercises have been added to several chapters. We have also taken the opportunity to correct a number of errors that were present in the first edition. Most of these errors were kindly pointed out to us by a variety of people to whom we are very grateful, especially Guido Schwarzer, Mike Cheung, Tobias Verbeke, Yihui Xie, Lothar Häberle, and Radoslav Harman. We learnt that many instructors use our book successfully for introductory courses in applied statistics. We have had the pleasure to give some courses based on the first edition of the book ourselves and we are happy to share slides covering many sections of particular chapters with our readers. \LaTeX sources and PDF versions of slides covering several chapters are available from the second author upon request. A new version of the **HSAUR** package, now called **HSAUR2** for obvious reasons, is available from CRAN. Basically the package vignettes have been updated to cover the new and modified material as well. Otherwise, the technical infrastructure remains as described in the preface to the first edition, with two small exceptions: names of R add-on packages are now printed in bold font and we refrain from showing significance stars in model summaries. Lastly we would like to thank Thomas Kneib and Achim Zeileis for commenting on the newly added material and again the CRC Press staff, in particular Rob Calver, for their support during the preparation of this second edition.

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