

**asuR**

Functions and data sets for a lecture in Advanced Statistics using R. Especially the functions `mancontr()` and `inspect()` may be of general interest. With `mancontr()`, short for manual contrasts, it is possible to specify your own contrasts and give them useful names. Something that is important in most projects of reasonable size. The function `inspect()` shows a wide range of inspection plots to validate model assumptions (currently for models fitted with `lm`, `glm`, and `lmer`). And do not forget to have a look at `norm.test()`, it is not only fun!

**BiodiversityR**

This package provides a GUI (Graphical User Interface, via the R-Commander) and some utility functions (often based on the `vegan` package) for statistical analysis of biodiversity and ecological communities, including species accumulation curves, diversity indices, Renyi profiles, GLMs for analysis of species abundance and presence-absence, distance matrices, Mantel tests, and cluster, constrained and unconstrained ordination analysis. A book on biodiversity and community ecology analysis is available for free download from the website.

**boot**

functions and datasets for bootstrapping from the book "Bootstrap Methods and Their Applications" by A. C. Davison and D. V. Hinkley (1997, CUP).

**DAAG**

various data sets used in examples and exercises in the book Maindonald, J.H. and Braun, W.J. (2003, 2007) "Data Analysis and Graphics Using R".

**gamair**

Data sets and scripts used in the book "Generalized Additive Models: An Introduction with R", Wood (2006) CRC.

**hsaur**

Functions, data sets, analyses and examples from the book 'A Handbook of Statistical Analyses Using R' (Brian S. Everitt and Torsten Hothorn, Chapman & Hall/CRC, 2006). The first chapter of the book, which is entitled 'An Introduction to R', is completely included in this package, for all other chapters, a vignette containing all data analyses is available.

**lme4**

Fit linear and generalized linear mixed-effects models.

**Iswr**

Data sets and scripts for text examples and exercises in P. Dalgaard (2008), 'Introductory Statistics with R', 2nd ed., Springer Verlag, ISBN 978-0387790534.

**MASS**

Functions and datasets to support Venables and Ripley, 'Modern Applied Statistics with S' (4th edition).

<b>multcomp</b>	Simultaneous tests and confidence intervals for general linear hypotheses in parametric models, including linear, generalized linear, linear mixed effects, and survival models.
<b>multtest</b>	Non-parametric bootstrap and permutation resampling-based multiple testing procedures for controlling the family-wise error rate (FWER), generalized family-wise error rate (gFWER), tail probability of the proportion of false positives (TPFP), and false discovery rate (FDR). Single-step and step-wise methods are implemented. Tests based on a variety of t- and F-statistics (including t-statistics based on regression parameters from linear and survival models) are included. Results are reported in terms of adjusted p-values, confidence regions and test statistic cutoffs. The procedures are directly applicable to identifying differentially expressed genes in DNA microarray experiments.
<b>Rcmdr</b>	A platform-independent basic-statistics GUI (graphical user interface) for R, based on the tcltk package.
<b>RcmdrPlugin.epack</b>	This package provides an Rcmdr "plug-in" based on the time series functions. Contributors: G. Jay Kerns, John Fox, and Richard Heiberger.
<b>RcmdrPlugin.Export</b>	This package provides facilities to graphically export Rcmdr output to LaTeX or HTML code. Essentially, at the moment, the plug-in is a graphical front-end to xtable(). It is intended to (1) facilitate exporting Rcmdr output to formats other than ASCII text and (2) provide R novices with an easy to use, easy to access reference on exporting R objects to formats suited for printed output.
<b>RcmdrPlugin.FactoMineR</b>	Plugin Rcmdr Plugin for the FactoMineR package
<b>RcmdrPlugin.HH</b>	Rcmdr menu support for many of the functions in the HH package. The focus is on menu items for functions we use in our introductory courses.
<b>RcmdrPlugin.IPSUR</b>	This package accompanies G. Andy Chang and G. Jay Kerns, Introduction to Probability and Statistics Using R (in progress). The package contributes functions unique to the book as well as specific configuration and selected functionality to the R Commander by John Fox.
<b>RcmdrPlugin.TeachingDemos</b>	This package provides an Rcmdr "plug-in" based on the TeachingDemos package, and is primarily for illustrative purposes.

**rcom**

R functions to interface with COM objects, R exposed to COM Clients

**RExcelInstaller**

RExcel, an add-in for MS Excel on MS Windows, allows to transfer data between R and Excel, writing VBA macros using R as a library for Excel, and calling R functions as worksheet function in Excel. RExcel integrates nicely with R Commander (Rcmdr). This R package installs the Excel add-in for Excel versions from 2002 to 2007. It only works on MS Windows.

**TeachingDemos**

This package is a set of demonstration functions that can be used in a classroom to demonstrate statistical concepts, or on your own to better understand the concepts or the programming.

**UsingR**

A collection of datasets to accompany the textbook "Using R for Introductory Statistics."

**vegan**

Ordination methods, diversity analysis and other functions for community and vegetation ecologists.