

Editorial

by Bettina Grün

On behalf of the editorial board, I am pleased to publish Volume 7, Issue 2 of the R Journal. This issue contains 20 contributed research articles and several contributions to the News and Notes section.

In the Contributed Research Articles section each of the articles presents an R package or new features of an existing R package which was extended. The articles cover different specialized statistical modeling tools, e.g., for regression with different distributions for the dependent variable, such as implemented by packages **zoib** for zero/one inflated beta regression and **hermite** for the generalized Hermite distribution, or different data structures as provided by packages **hglm** for conditional and simultaneous autoregressive spatial models and **apc** for age-period-cohort analysis. In addition tools for program evaluation are provided by package **pampe** and quantization-based quantile regression by package **QuantifQuantile**. Other aspects of statistical modeling are to perform variable selection or variable grouping and are covered for example by packages **VSURE**, **BSGS** and **ClustVarLV** or to determine dissimilarities between observations with special data structures as provided by packages **treeClust** and **mmpp**.

Other areas in applied statistics, e.g., to determine optimal designs, suitable sample sizes or perform uncertainty and sensitivity analysis are covered by packages **ALTopt**, **PracTools** and **mtk**. Diagnostic tools for approximate Bayesian computation are provided by package **abctools**; tools for dealing with multilabel datasets are contained in package **mldr**. Visualization methods for pairwise comparisons, which are for example used when comparing algorithms in machine learning, are given in package **SRCS**.

In addition new areas of application of R are seized, e.g., by package **rivr** which provides the tools for undergraduate and graduate courses in open-channel hydraulics. Infrastructure in the area of numerical mathematics for evaluating the hypergeometric function is given in package **hypergeo** and tools to help with coding in R are contained in package **GUIProfiler** for profiling R code.

Overall this collection of contributed research articles indicates the wide range of statistical methods from different areas currently covered by extension packages for R and the increasing possible use of R in new areas of application.

In addition the News and Notes section contains news by the R Consortium and the R Foundation providing some background information to the setting up of the Consortium and its interaction with the R Foundation. In addition a conference report on useR! 2015, the annual international R user conference, which took place from June 30 until July 3, 2015 in Aalborg, Denmark and attracted 660 participants from 42 countries is given. Furthermore this section contains the usual updates on the Bioconductor project, changes in R itself and CRAN.

I hope you enjoy the issue.

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