- The global internal variables `.Dyn.libs` and `.lib.loc` are removed in favor of the internal functions `.dynLibs()` and `.libPaths()`.
- `restart()` is deprecated in preparation for proper exception handling. Use `try()`, as has long been recommended.

Documentation changes

- New `demo(persp)` containing some of the former `example(persp)` ones and more.

C-level facilities

- 'Rversion.h' is no longer automatically included by 'R.h'. Include it explicitly if you need it.
- New entry point `R_tmpnam` in 'R_ext/Utils.h'.
- The Unix event loop interface has been changed to facilitate integration with other loops. `R_checkActivity` and `R_runHandlers` should eventually replace `getSelectedHandler`.

Installation changes

- Perl 5.005 or newer is now required.
- `R CMD INSTALL` is now guaranteed to sort the R source files in ASCII order.

Utilities

- `R CMD check` now tests for mis-use on an installed or binary package, and sets `T` and `F` to `NULL` when running the examples.
- New function `SweaveSyntConv()` converts between Sweave file syntaxes. `RweaveLatex()` now gets its prompt from `options()` and uses the text width as linebreak cutoff for deparsing input statements.

See the file 'NEWS' in the R distribution for additional information on bug fixes.

Changes on CRAN

by Kurt Hornik

CRAN packages

CGIwithR Facilities for the use of R to write CGI scripts. By David Firth.

ISwR Data sets and scripts for text examples and exercises in P. Dalgaard (2002), "Introductory Statistics with R", Springer Verlag. By Peter Dalgaard.

KMsurv Data sets and functions for Klein and Moeschberger (1997), "Survival Analysis, Techniques for Censored and Truncated Data", Springer. Original by Klein and Moeschberger, modifications by Jun Yan.

MPV Data sets from the book "Introduction to Linear Regression Analysis" by D. C. Montgomery, E. A. Peck, and C. G. Vining, 2001, John Wiley and Sons. By W. J. Braun.

RColorBrewer The package provides palettes for drawing nice maps shaded according to a variable. By Erich Neuwirth.

SparseM Basic linear algebra for sparse matrices. By Roger Koenker and Pin Ng.

StatDataML Read and write StatDataML files, alpha implementation of the StatDataML proposal. By Torsten Hothorn, Friedrich Leisch, and David Meyer.

ape Ape provides functions for reading, writing, and plotting phylogenetic trees in parenthetic format (standard Newick format), analyses of comparative data in a phylogenetic framework, analyses of diversification and macroevolution, computing distances from allelic and nucleotide data, reading nucleotide sequences from GenBank via internet, and several tools such as Mantel's test, computation of minimum spanning tree, or the population parameter theta based on various approaches. By Emmanuel Paradis, Korbibian Strimmer, Julien Claude, Yvonnick Noel, and Ben Bolker.

deal Bayesian networks with continuous and/or discrete variables can be learned and compared from data. By Susanne Gammelgaard Bøttcher and Claus Dethlefsen.

geepack Generalized estimating equations solver for parameters in mean, scale, and correlation structures, through mean link, scale link, and correlation link. Can also handle clustered categorical responses. By Jun Yan.

haplo.score A suite of routines that can be used to compute score statistics to test associations between haplotypes and a wide variety of traits, including binary, ordinal, quantitative, and Poisson. These methods assume that all subjects are unrelated and that haplotypes are ambiguous (due to unknown linkage phase of the genetic markers). The methods provide several different global and haplotype-specific tests for association, as well as provide adjustment for non-genetic covariates and computation of simulation *p*-values (which may be needed for sparse data). By Charles M. Rowland, David E. Tines, and Daniel J. Schaid. R version translation by Gregory R. Warnes.

mclust1998 Model-based cluster analysis: the 1998 version of MCLUST. By C. Fraley and A. E. Raftery, Dept. of Statistics, University of Washington. R port by Ron Wehrens.

msm Functions for fitting continuous-time Markov multi-state models to categorical processes observed at arbitrary times, optionally with misclassified responses, and covariates on transition or misclassification rates. By Christopher H. Jackson.

multcomp Multiple comparison procedures for the one-way layout. By Frank Bretz, Torsten Hothorn and Peter Westfall.

normix Onedimensional Normal Mixture Models Classes, for, e.g., density estimation or clustering algorithms research and teaching; providing the widely used Marron-Wand densities. By Martin Mächler.

qvcalc Functions to compute quasi-variances and associated measures of approximation error. By David Firth.

relimp Functions to facilitate inference on the relative importance of predictors in a linear or generalized linear model. By David Firth.

rgenoud A genetic algorithm plus derivative optimizer. By Walter R. Mebane, Jr., and Jasjeet Singh Sekhon.

sound Basic functions for dealing with '.wav' files and sound samples. By Matthias Heymann.

survrec Estimation of survival function for recurrent event data using Peña-Strawderman-Hollander, Whang-Chang estimators and MLE estimation under a Gamma Frailty model. Fortran 77 original by Edsel A Peña and Robert L Strawderman. Added Fortran routines, R code and packaging by Juan R González.

CRAN mirrors the R packages from the Omegahat project in directory 'src/contrib/Omegahat'. The following are recent additions:

RGtkBindingGenerator A meta-package which generates C and R code to provide bindings to a Gtk-based library. By Duncan Temple Lang.

RXLisp An interface to call XLisp-Stat functions from within R, inspired by Forrest Young's remarks about dynamic graphics, XLisp-Stat and R on R-devel. By Duncan Temple Lang.

Kurt Hornik
Wirtschaftsuniversität Wien, Austria
Technische Universität Wien, Austria
Kurt.Hornik@R-project.org

New Publications

The manual "An Introduction to R" by W. N. Venables, D. M. Smith and the R Development Core Team has now been published as a printed book (ISBN 0-9541617-4-2). It is available worldwide through the major online bookstores and wholesalers, at a retail price of $19.95 (£12.95 in UK). Further details are available at the publisher's website www.network-theory.co.uk.