

The IRRI logo consists of the letters "IRRI" in a green, serif font. To the right of the text is a horizontal bar divided into two segments: a yellow segment on the left and a green segment on the right.

IRRI

Integration of Statistical Analysis

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The CIMMYT logo features a stylized white icon of a corn cob on the left, followed by the text "CIMMYT" in a white, sans-serif font. A small "MR" trademark symbol is located at the bottom right of the text.

CIMMYT^{MR}

Rationale

- The future version of ICIS will support conventional breeding as well as marker-assisted breeding (MAB).
- The breeding decisions making needs to be supported by statistical analysis and data visualization.
- The statistical analysis and visualization should be integrated into the breeding information workflow implemented in ICIS.
- Existing software should be used as much as possible for statistical analysis and visualization.

R: Software environment for statistical computing and graphics

- Open Source software. Can be used, integrated, and distributed with very few restrictions.
- Runs on different platforms: Windows, Unix/Linux, MacOS X.
- Is highly extensible. OO programming language. Package development, testing, and distribution support.
- Advanced statistics and graphics.
- Base (core) package and 1600+ contributed packages.

R packages

The Comprehensive R Archive Network - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://cran.ms.unimelb.edu.au/

Contributed Packages

Installation of Packages

Please type `help("INSTALL")` or `help("install.packages")` in R for information on how to install packages from this directory. The manual [R Installation and Administration](#) (also contained in the R base sources) explains the process in detail.

[CRAN Task Views](#) allow you to browse packages by topic and provide tools to automatically install all packages for special areas of interest. Currently, 22 views are available.

Daily Package Check Results

All packages are tested regularly on machines running [Debian GNU/Linux](#). Packages are also checked under MacOS X and Windows, but only at the day the package appears on CRAN.

The results are summarized in the [check summary](#) (some [timings](#) are also available). Additional details for Windows checking and building can be found in the [Windows check summary](#).

Writing Your Own Packages

The manual [Writing R Extensions](#) (also contained in the R base sources) explains how to write new packages and how to contribute them to CRAN.

Available Bundles and Packages

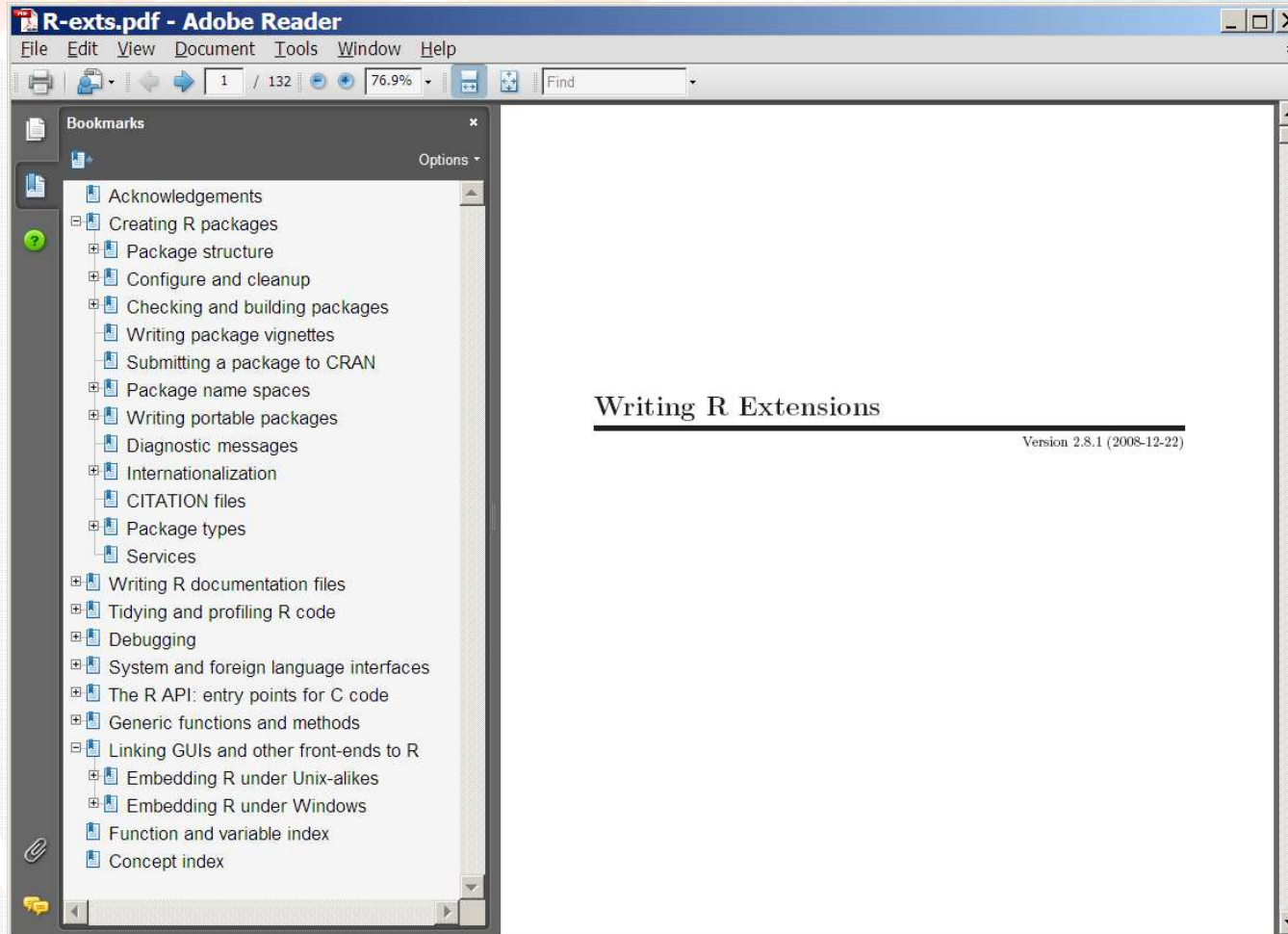
Currently, the CRAN package repository features 1647 objects including 1639 packages and 8 bundles containing 34 packages, for a total of 1673 available packages.

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

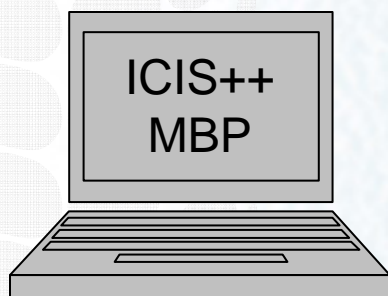
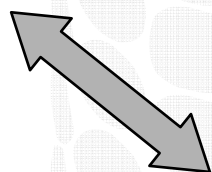
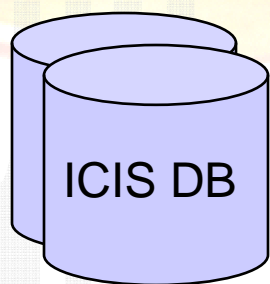
ADaCGH	Analysis of data from aCGH experiments
AER	Applied Econometrics with R
AIS	Tools to look at the data ("Ad Indicia Spectata")
ALS	multivariate curve resolution alternating least squares (MCR-ALS)
AMORE	A MORE flexible neural network package
ARES	Allelic richness estimation, with extrapolation beyond the sample size
AcceptanceSampling	Creation and evaluation of Acceptance Sampling Plans
AdVfit	Adaptive Mixture of Student-t distributions
AdaptFit	Adaptive Semiparametric Regression
AlgDesign	AlgDesign

Done zotero

R package development



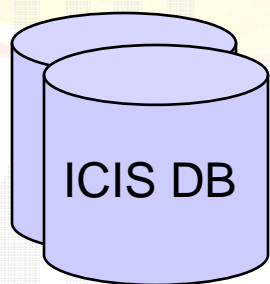
Embedding R



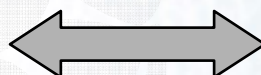
RICIS
RMBP

JRI, rJava
Rcpp, RPy
Rserve
RExcel

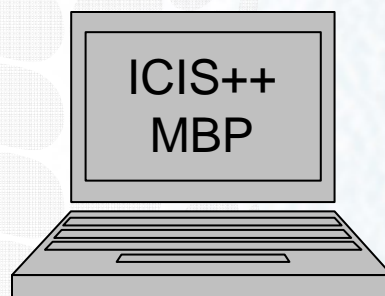
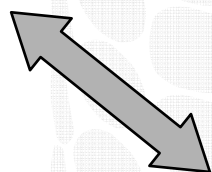
Embedding R



ROracle, RMySQL
RODBC, RPostgreSQL

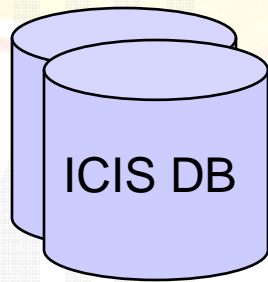


RICIS
RMBP



JRI, rJava
Rcpp, RPy
Rserve
RExcel

R GUI application



ROracle, RMySQL
RODBC, RPostgreSQL



RGTK



RICIS
RMBP

R GUI application - Rattle

R R Data Miner - [Rattle (nhanes.csv)]

Project Edit Tools Settings Help Rattle Version 2.4.0 togaware.com

Execute New Open Save Report Export Quit

Data Explore Test Transform Cluster Associate Model Evaluate Log

Type: Summary Distributions Latticist GGobi Correlation Hier

Sampling is Active Benford Bars Benford Digit: 1 abs +ve -ve

Numeric: Clear Plots per Page: 4 Annotate

No.	Variable	Box Plot	Histogram	Cumulative	Benford	Min; Median/Mean; Max
2	fseqn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.00; 10111.00/10035.75; 20076
5	age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.00; 23.00/29.95; 90.00
7	weight	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.80; 59.35/54.13; 241.80
8	height	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	73.60; 160.40/151.93; 206.50

Category: Clear

No.	Variable	Bar Plot	Dot Plot	Mosaic	Levels
3	ethn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
4	sex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
6	ageunit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2

All 4 plots generated.

R Rattle: Plot 2

Distribution of weight (sample)

ethn
Rattle 2009-Feb-17 06:23:01 TMetz

Distribution of height (sample)

ethn
Rattle 2009-Feb-17 06:23:03 TMetz

Distribution of weight (sample)

Rattle 2009-Feb-17 06:23:05 TMetz

Distribution of height (sample)

Rattle 2009-Feb-17 06:23:06 TMetz

Save Copy Print Close