

# Package ‘rcheology’

June 24, 2024

**Version** 4.4.1.0

**Title** Data on Base and Recommended Packages for Current and Previous Versions of R

**Description**

Provides a dataset of functions in all base and recommended packages of R versions 0.50 onwards.

**License** CC0

**URL** <https://github.com/hughjonesd/rcheology>

**BugReports** <https://github.com/hughjonesd/rcheology/issues>

**Depends** R(>= 2.10)

**Encoding** UTF-8

**LazyData** true

**ByteCompile** true

**RoxygenNote** 7.2.3

**Suggests** testthat (>= 3.0.0)

**Config/testthat/edition** 3

**NeedsCompilation** no

**Author** David Hugh-Jones [aut, cre]

**Maintainer** David Hugh-Jones <davidhughjones@gmail.com>

**Repository** CRAN

**Date/Publication** 2024-06-24 18:10:07 UTC

## Contents

|                             |          |
|-----------------------------|----------|
| rcheology-package . . . . . | 2        |
| fun_changed . . . . .       | 3        |
| rcheology . . . . .         | 3        |
| Rversions . . . . .         | 4        |
| <b>Index</b>                | <b>5</b> |

---

rcheology-package      *Data on base packages from current and previous versions of R*

---

## Description

rcheology is a data package providing two data frames:

## Details

- [rcheology](#) lists objects in versions of R from 0.50 onwards.
- [Rversions](#) lists R versions and their release dates. NB: For a more complete and "canonical" solution, see the [rversions](#) package.

The version of the rcheology package reflects the latest R version to be included in the data, e.g. 3.5.1.x contains data up to and including R 3.5.1.

An online app for data exploration is available at <https://hughjonesd.shinyapps.io/rcheology/>.

### Where the data comes from:

R versions are built using the [evercran](#) project.

Results are found from running `ls(all.names = TRUE)` on all installed packages. For more details, see `guest-list-objects.R`.

The `Rversions` data frame lists versions of R and release dates.

## Limitations

- Functions not built on the relevant platform - e.g. Windows functions - are not included.
- R 0.60 data is not yet included.
- Functions in package `tcltk` are not yet included before R 2.0.0.

## Historical quirks

- In 2.9.0, package `Matrix` was mistakenly given priority "Recommended" not "recommended" in the output of `installed.packages()`.
- In 2.5.0, package `rcompngen` was given priority NA. The NEWS file records it as a recommended package.

Both these errors have been corrected in the rcheology data.

---

|             |  |
|-------------|--|
| fun_changed | <i>Check if a core R function changed between R versions</i> |
|-------------|--|

---

**Description**

Check if a core R function changed between R versions

**Usage**

```
fun_changed(fn, from = NULL, to = NULL, package = NULL)
```

**Arguments**

|         |   |
|---------|---|
| fn      | Character name of a function in a core R package. |
| from    | Minimum R version (optional).                     |
| to      | Maximum R version (optional).                     |
| package | Name of the package (optional).                   |

**Value**

0 if there was no change. 1 if the function's arguments changed. 2 if the function was not present in all versions. If the function can't be found or exists in multiple packages, throws an error.

**Examples**

```
fun_changed("debugonce")  
  
fun_changed("debugonce", "3.4.0", "3.4.3")  
fun_changed("debugonce", "3.3.0", "3.4.3")
```

---

|           |  |
|-----------|--|
| rcheology | <i>Data on objects from current and previous versions of R</i> |
|-----------|--|

---

**Description**

A data frame with every function (and other object) in versions of R from 1.0.1 onwards. Variables are:

- package: package the object comes from
- name: name of the object
- Rversion: version of R as major.minor.patch
- type: Result of calling `typeof()` on the object
- class: `class()` of the object, separated by slashes if there are multiple classes.

- `exported`: TRUE if the object name was found in `getNamespaceExports()`. True for anything in the "base" package. NA if the package does not have a namespace (e.g. "datasets" in early versions).
- `hidden`: TRUE if the object name starts with ". ". These objects are not reported by `ls()`.
- `S4generic`: TRUE if the object is an S4 generic according to `methods::isGeneric()`. Note that in earlier versions of rcheology, this column was called `generic`.
- `priority`: "base" for base packages, "recommended" for recommended packages. NA for earlier versions of R (pre 1.6.0) when the priority concept did not exist.
- `args`: the arguments of the function, or NA for non-functions

---

Rversions

*Previous R versions with dates*

---

### Description

A data frame with 2 variables:

- `Rversion`: version of R as `major.minor.patch`
- `date`: date of release

### Details

This goes back to 0.x releases. For 2.15.1-w, see [here](#).

# Index

`class()`, 3

`fun_changed`, 3

`getNamespaceExports()`, 4

`installed.packages()`, 2

`ls()`, 4

`methods::isGeneric()`, 4

`rcheology`, 2, 3

`rcheology-package`, 2

`Rversions`, 2, 4

`typeof()`, 3