# Package ‘easystats’

November 29, 2022

**Type** Package  
**Title** Framework for Easy Statistical Modeling, Visualization, and Reporting  
**Version** 0.6.0  
**Maintainer** Daniel Lüdecke &lt;d.luedecke@uke.de&gt;  
**Description** A meta-package that installs and loads a set of packages from 'easystats' ecosystem in a single step. This collection of packages provide a unifying and consistent framework for statistical modeling, visualization, and reporting. Additionally, it provides articles targeted at instructors for teaching 'easystats', and a dashboard targeted at new R users for easily conducting statistical analysis by accessing summary results, model fit indices, and visualizations with minimal programming.  
**License** GPL-3  
**URL** [https://easystats.github.io/easystats/](https://easystats.github.io/easystats/)  
**BugReports** [https://github.com/easystats/easystats/issues](https://github.com/easystats/easystats/issues)  
**Depends** R (&gt;= 3.6)  
**Imports** bayestestR (&gt;= 0.13.0), correlation (&gt;= 0.8.3), datawizard (&gt;= 0.6.4), effectsize (&gt;= 0.8.2), insight (&gt;= 0.18.8), modelbased (&gt;= 0.8.5), parameters (&gt;= 0.20.0), performance (&gt;= 0.10.1), report (&gt;= 0.5.1), see (&gt;= 0.7.4), tools, utils  
**Suggests** DT, flexdashboard (&gt;= 0.6.0), jsonlite, knitr, rmarkdown, rvest, testthat (&gt;= 3.1.0), withr, xml2  
**VignetteBuilder** knitr  
**Encoding** UTF-8  
**Language** en-US  
**RoxygenNote** 7.2.2  
**Config/testthat/edition** 3  
**Config/Needs/website** rstudio/bslib, r-lib/pkgdown, easystats/easystats_template  
**NeedsCompilation** no
**Author**  Daniel Lüdecke [aut, cre] (<https://orcid.org/0000-0002-8895-3206>, @strengeljacket),
Dominique Makowski [aut] (<https://orcid.org/0000-0001-5375-9967>, @Dom_Makowski),
Mattan S. Ben-Shachar [aut] (<https://orcid.org/0000-0002-4287-4801>),
Indrajeet Patil [aut] (<https://orcid.org/0000-0003-1995-6531>, @patilindrajeets),
Brenton M. Wiernik [aut] (<https://orcid.org/0000-0001-9560-6336>, @bmwiernik)

**Repository** CRAN

**Date/Publication** 2022-11-29 22:00:02 UTC

### R topics documented:

<table>
<thead>
<tr>
<th>R topic</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>easystats_update</td>
<td>2</td>
</tr>
<tr>
<td>easystats_zen</td>
<td>3</td>
</tr>
<tr>
<td>install_latest</td>
<td>3</td>
</tr>
<tr>
<td>install_suggested</td>
<td>4</td>
</tr>
<tr>
<td>model_dashboard</td>
<td>5</td>
</tr>
</tbody>
</table>

**Index**  8

---

**Description**

Update easystats-packages and its dependencies from CRAN, if necessary.

**Usage**

```r
easystats_update(which = c("all", "core", "deps"))
```

**Arguments**

- `which` String, indicates whether easystats-packages (which = "core"), dependencies (which = "deps") or both (which = "all") should be checked for available updates.

**Value**

Invisible NULL.
Examples

```r
## Not run:
# check which local easystats-packages (and their dependencies)
# are out of date and install updates from CRAN
easystats_update()

# update only easystats core-packages
easystats_update("core")

## End(Not run)
```

Description

Welcome to the easyverse

Usage

easystats_zen()

Value

A reassuring message.

Examples

easystats_zen()

install_latest

Install the easystats suite from R-universe (GitHub) or CRAN

Description

This function can be used to install all the easystats packages, either latest development versions (from R-universe/GitHub) or the current versions from CRAN. If the development versions are installed, packages will be installed from the stable branch (master/main) for each package.

Usage

```r
install_latest(
  source = c("development", "cran"),
  packages = "all",
  force = FALSE,
  verbose = TRUE
)
```
install_suggested

Arguments

source  Character. Either "development" or "cran". If "cran", packages will be installed from the default CRAN mirror returned by `getOption("repos")[\"CRAN\"]`. If "development" (the default), packages are installed from the r-universe repository (https://easystats.r-universe.dev/).
packages  Character vector, indicating which packages to be installed. By default, the option "all" will install all easystats packages.
force  Logical, if FALSE, only those packages with a newer version number will be installed. Use `force=TRUE` to force installation of all packages, even if the version number for the locally installed packages is identical to the latest development-versions. Only applies when `source="development"`.
verbose  Toggle messages.

Value

Invisible NULL.

Examples

if (FALSE) {
  # install latest development-version of easystats packages from
  # the r-universe repository, but only those packages that have newer
  # versions available
  install_latest()

  # install all latest development-version of easystats packages from
  # the r-universe repository, no matter whether local installations
  # are up to date or not.
  install_latest(force = TRUE)
}  

install_suggested  Download all suggested packages

Description

In easystats, we have a 0-dependency policy, which makes our packages fairly light and fast to install. However, we rely on many many (many) packages for testing (at least all the packages for functions that we support) and some specific features. These "soft dependencies" can be downloaded at once using this function. This will allow you to fully utilize all of easystats’ functionalities without errors.

Usage

install_suggested(package = "easystats")

show_suggested(package = "easystats")

show_reverse_dependencies(package = "easystats")
Arguments

package If NULL or "easystats" (the default), all suggested packages for all 'easystats' packages will be installed. If specific packages are specified, only suggested packages for those packages will be installed.

Details

To reduce the dependency load, 'easystats' packages by default will not download all internally needed packages. It will ask the user to download them only if they are needed. The current function can help install all packages a given 'easystats' package might need. For example, install_suggested("see"). show_suggested() is a convenient helper to show the current list of suggested packages for each 'easystats' package.

Value

Useful only for its side-effect of installing the needed packages.

Examples

```r
## Not run:
install_suggested("easystats")

# listing all reverse dependencies of easystats packages
show_reverse_dependencies()

## End(Not run)
```

---

[model_dashboard]

Description

A dashboard containing the following details for the entered regression model:

- a tabular summary of parameter estimates
- a dot-and-whisker plot for parameter estimates
- a tabular summary of indices for the quality of model fit
- a collection of models for checking model assumptions
- a text report
- a model information table
Usage

model_dashboard(
  model,
  check_model_args = NULL,
  parameters_args = NULL,
  performance_args = NULL,
  output_file = "easydashboard.html",
  output_dir = getwd(),
  rmd_dir = system.file("templates/easydashboard.Rmd", package = "easystats")
)

Arguments

model A regression model object.

check_model_args A list of named arguments that are passed down to performance::check_model().
For further documentation and details about the arguments, see this website. See also 'Examples'.

parameters_args A list of named arguments that are passed down to parameters::model_parameters().
For further documentation and details about the arguments, see this website. See also 'Examples'.

performance_args A list of named arguments that are passed down to performance::model_performance().
For further documentation and details about the arguments, see this website. See also 'Examples'.

output_file A string specifying the file name in rmarkdown::render(). Default is "easydashboard.html".

output_dir A string specifying the path to the output directory for report in rmarkdown::render().
Default is to use the working directory.

rmd_dir A string specifying the path to the directory containing the RMarkdown template file. By default, package uses the template shipped with the package installation (inst/templates/easydashboard.Rmd).

Value

An HTML dashboard.

Troubleshooting

For models with many observations, or for more complex models in general, generating the model assumptions plot might become very slow. One reason is that the underlying graphic engine becomes slow for plotting many data points. In such cases, setting the argument check_model_args = list(show_dots = FALSE) might help. Furthermore, look at other arguments of ?performance::check_model, which can be set using check_model_args, to increase performance (in particular the check-argument can help, to skip some unnecessary checks).
Examples

if (interactive()) {
  mod <- lm(wt ~ mpg, mtcars)
  
  # with default options
  model_dashboard(mod)
  
  # customizing 'parameters' output: standardize coefficients
  model_dashboard(mod, parameters_args = list(standardize = "refit"))
  
  # customizing 'performance' output: only show selected performance metrics
  model_dashboard(mod, performance_args = list(metrics = c("AIC", "RMSE")))
  
  # customizing output of model assumptions plot: don't show dots (faster plot)
  model_dashboard(mod, check_model_args = list(show_dots = FALSE))
}
Index

easystats_update, 2
easystats_zen, 3
install_latest, 3
install_suggested, 4
model_dashboard, 5
show_reverse_dependencies
  (install_suggested), 4
show_suggested (install_suggested), 4