

Package ‘partialling.out’

May 9, 2026

Title Residuals from Partial Regressions

Version 0.2.0

Description Creates a data frame with the residuals of partial regressions of the main explanatory variable and the variable of interest. This method follows the Frisch-Waugh-Lovell theorem, as explained in Lovell (2008) <[doi:10.3200/JECE.39.1.88-91](https://doi.org/10.3200/JECE.39.1.88-91)>.

License GPL (>= 3)

BugReports <https://github.com/ropensci/partialling.out/issues/>

Suggests tinytest, tinysnapshot, knitr, rmarkdown, palmerpenguins, tinytable, fwlplot, tsibble, units, purrr, fontquiver, rsvg, svglite

Config/testthat/edition 3

Encoding UTF-8

RoxygenNote 7.3.2

VignetteBuilder knitr

Imports glue, lifecycle, rlang, fixest, lfe, stats, tinyplot

URL <https://docs.ropensci.org/partialling.out/>,
<https://github.com/ropensci/partialling.out/>

NeedsCompilation no

Author Marc Bosch-Matas [aut, cre] (ORCID:
<<https://orcid.org/0009-0008-8653-0577>>),
Christian Testa [rev] (Christian reviewed the package (v. 0.1.1) for
rOpenSci, see
<<https://github.com/ropensci/software-review/issues/703>>),
Kyle Butts [rev] (Kyle reviewed the package (v. 0.1.1) for rOpenSci,
see <<https://github.com/ropensci/software-review/issues/703>>),
Adam Loy [rev] (Adam reviewed the package (v. 0.1.1) for rOpenSci, see
<<https://github.com/ropensci/software-review/issues/703>>)

Maintainer Marc Bosch-Matas <mboschmatas@gmail.com>

Depends R (>= 4.1.0)

Repository CRAN

Date/Publication 2025-10-17 20:10:02 UTC

Contents

partialling_out	2
plot_partial_residuals	3
Index	4

partialling_out	<i>partialling_out: partialling out variable of interest and main</i>
-----------------	---

Description

Creates a data.frame of the residualised main explanatory variable and, if wanted, variable of interest of a linear or fixed effects model

Usage

```
partialling_out(model, data, weights, both, na.rm, ...)
```

Arguments

model	object for which we want to residualise variables
data	data.frame used in the original model. Using different data will return unexpected results or an error.
weights	a numeric vector for weighting the partial models. Length must be equal to number of rows of data
both	if TRUE will residualise both the variable of interest and the first explanatory variable in the model. If FALSE, only the latter. Set to TRUE by default
na.rm	if TRUE will remove observations with NA before any models are run. If FALSE, the underlying lm, feols, or felm will remove NA values but errors may arise if weights are used.
...	Any other lm, feols, or felm parameters that will be passed to the partial regressions

Details

The function regresses the main (i.e. first in the model) explanatory variable and the variable of interest (if parameter both is set to TRUE) against all other control variables and fixed effects and returns the residuals in a data.frame

Will accept lm, felm (lfe package), and feols (fixest package) objects

Value

a data.frame with the (residualised) variable of interest and residualised main explanatory variable

Examples

```
library(palmerpenguins)
library(fixest)
model <- feols(bill_length_mm ~ bill_depth_mm | species + island,
              data = penguins)
partial_df <- partialling_out(model, penguins, both = TRUE)
```

plot_partial_residuals

plot_partial_residuals: scatterplot of partial residuals

Description

Function for plotting partial residuals Uses tinyplot as backend

Usage

```
plot_partial_residuals(x, add_lm = TRUE, quantile = FALSE, probs = 0.02, ...)
```

Arguments

x	a partial_residuals objects from partialling_out()
add_lm	if TRUE, a lm will be plotted
quantile	if TRUE, will plot only the mean values of the quantiles of the mean explanatory variable specified by probs
probs	numeric vector of length one that specifies the number of quantiles to be computed if quantile is TRUE. by default, 0.02, which will give 50 quantiles.
...	Any other tinyplot::plt() params

Value

invisibly, x

Examples

```
library(palmerpenguins)
library(fixest)
model <- feols(bill_length_mm ~ bill_depth_mm | species + island,
              data = penguins)
partial_df <- partialling_out(model, penguins, both = TRUE)
plot_partial_residuals(partial_df)
```

Index

`partialling_out`, 2
`plot_partial_residuals`, 3