betaSandwich: Robust Confidence Intervals for Standardized Regression Coefficients

Ivan Jacob Agaloos Pesigan

Description

Generates robust confidence intervals for standardized regression coefficients using heteroscedasticity-consistent standard errors for models fitted by lm() as described in Dudgeon (2017).

Installation

You can install the released version of betaSandwich from GitHub with:

```
install.packages("remotes")
remotes::install_github("jeksterslab/betaSandwich")
```

Example

Describe the data and model here.

```
object <- lm(
   QUALITY ~ NARTIC + PCTGRT + PCTSUPP,
   data = stevens
)</pre>
```

summary(object)

```
BetaHC(object, type = "hc5")

#> Call:

#> BetaHC(object = object, type = "hc5")

#>

#> Standardized regression slopes with HC5 standard errors:

#> est se t p 0.05% 0.5% 2.5% 97.5% 99.5% 99.95%

#> NARTIC 0.4951 0.0730 6.7834 0.0000 0.2369 0.2982 0.3478 0.6425 0.6921 0.7534

#> PCTGRT 0.3915 0.0757 5.1749 0.0000 0.1239 0.1874 0.2388 0.5442 0.5956 0.6591

#> PCTSUPP 0.2632 0.0794 3.3142 0.0019 -0.0178 0.0489 0.1030 0.4235 0.4776 0.5443
```

More Information

See GitHub Pages for package documentation.

References

Dudgeon, P. (2017). Some improvements in confidence intervals for standardized regression coefficients. *Psychometrika*, 82(4), 928–951. https://doi.org/10.1007/s11336-017-9563-z

R Core Team. (2022). R: A language and environment for statistical computing. R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/