Package: tidydlnm (via r-universe)

August 25, 2024

Title Wrapper Package for Tidy DLNM Output and Plots

Version 0.0.1

Description tidydlnm is a wrapper package that converts output from the dlnm package into more tidyverse-friendly tibbles and plots.

License GPL (>= 3)

Imports cli (>= 2.5.0), ggplot2 (>= 3.3.3), tibble (>= 3.1.1)

Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.3

Suggests dplyr (>= 1.0.6), grDevices, knitr, rmarkdown, rlang, dlnm (>= 2.4.5), testthat (>= 3.0.0)

Config/testthat/edition 3

URL http://geomarker.io/tidydlnm/

VignetteBuilder knitr

Repository https://geomarker-io.r-universe.dev

RemoteUrl https://github.com/geomarker-io/tidydlnm

RemoteRef HEAD

RemoteSha 63b2d18c7a2b73e59c3efc53310638014edc004d

Contents

tidy_cumul_fits *get tibble of cumulative estimates at each lag*

Description

get tibble of cumulative estimates at each lag

Usage

```
tidy_cumul_fits(cpred, call = rlang::caller_env())
```

Arguments

cpred	a crosspred object created from dlnm::crosspred()
call	used for error handling

Value

a tibble with columns for lag, estimate, se, and lower and upper 95% confidence bounds (one row per lag)

tidy_lag_fits *get tibble of estimates at each lag*

Description

get tibble of estimates at each lag

Usage

```
tidy_lag_fits(cpred, call = rlang::caller_env())
```

Arguments

cpred	a crosspred object created from dlnm::crosspred()
call	used for error handling

Value

a tibble with columns for lag, estimate, se, and lower and upper 95% confidence bounds (one row per lag)

tidy_lag_plot *plot estimate at each lag and confidence intervals using ggplot2*

Description

plot estimate at each lag and confidence intervals using ggplot2

Usage

```
tidy_lag_plot(
  lag_fits,
  continuous = TRUE,
  shading = FALSE,
  shade_colors = c("red", NA, "blue")
)
```

Arguments

lag_fits	tibble containing lag, estimate, and lower and upper bounds of confidence intervals; most likely output from [tidydlnm::tidy_lag_fits()``] or [tidydlnm::tidy_cumul_fits()“]
continuous	logical. When TRUE, creates a plot with ggplot2::geom_line() and ggplot2::geom_ribbon() (used when arglag is a continuous function). When FALSE, creates a plot with ggplot2::geom_pointrange() (used when arglag is not a continuous function – eg, 'integer' or 'strata')
shading	logical. When TRUE, adds colored shading to the regions of the plot corresponding to significant associations as defined by the signSum variable of lag_fits
shade_colors	vector of three colors desired to shade the regions of negative, null, and positive association, respectively.

Value

a ggplot object

tidy_overall_fit *get tibble of overall effect estimates*

Description

get tibble of overall effect estimates

Usage

```
tidy_overall_fit(cpred, call = rlang::caller_env())
```

Arguments

`cpred`	a crosspred object created from `dlnm::crosspred()`
`call`	used for error handling

Value

a tibble with columns for estimate, se, and lower and upper 95% confidence bounds (1 row)

`tidy_window_summary` *get tibble detailing each window of association with summary statistics*

Description

get tibble detailing each window of association with summary statistics

Usage

```
tidy_window_summary(lag_fits)
```

Arguments

`lag_fits`	tibble containing lag, estimate, and lower and upper bounds of confidence intervals; most likely output from tidy_lag_fits() or tidy_cumul_fits()

Value

a tibble containing windows defined by starting and ending lags, window length, maximum absolute effect estimate, and the lag at which that maximum occurs

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