Package 'EpiCurve'

July 21, 2025

Type Package

Title Plot an Epidemic Curve

Version 2.4-2

Date 2021-07-14

Description
Creates simple or stacked epidemic curves for hourly, daily, weekly or monthly outcome data.

License LGPL-3

Encoding UTF-8

URL https://github.com/IamKDO/EpiCurve

Depends ggplot2, dplyr, ISOweek, scales, timeDate

Imports RColorBrewer, tibble

Suggests knitr, rmarkdown

VignetteBuilder knitr

NeedsCompilation no

Author Jean Pierre Decorps [aut, cre]

Maintainer Jean Pierre Decorps <jean.pierre.decorps@gmail.com>

Repository CRAN

Date/Publication 2021-07-14 16:20:05 UTC

Contents

EpiCurve *Plot an Epidemic Curve*

Description

This function plot an epidemic curve with ggplot2

Usage

```
EpiCurve(x, date = NULL,freq = NULL, cutvar = NULL,
   period = NULL, to.period = NULL, split = 1, cutorder = NULL, colors = NULL,
   title = NULL, xlabel = NULL, ylabel=NULL, note=NULL, square = TRUE)
```

Arguments

x	data.frame with at least one column with Date type
date	character, name of Date column
freq	character, name of a column with a value to display
cutvar	character, name of a column with factors
period	character, c("hour", "day","week", "month")
to.period	character, Convert date period to another period only for aggregated data. If period is "day", to.period can be "week" or "month". If period is "week", to.period can be "month".
split	integer, c(1,2,3,4,6,8,12) Value for hourly split
cutorder	character vector of factors
colors	character vector of colors
title	character, title of the plot
xlabel	character, label for x axis
ylabel	character, label for y axis
note	character, add a note under the graph
square	boolean, If TRUE (default) squares are used to plot the curve, else if the number of cases is too hight please use square = FALSE

Details

When period is "week" the date MUST be in ISOweek format YYYY-WNN and library ISOweek is needed. When period is "month" the date MUST be formated YYYY-MM.

When period is "hour" the date MUST be in timeDate format (YYYY-mm-dd HH:MM:SS) or (YYYY-mm-dd HH:MM)

Author(s)

<jean.pierre.decorps@gmail.com>

References

<https://rlab-epiconcept.blogspot.fr/2016/09/courbes-epidemiques-avec-ggplot2.html>

<https://fr.wikipedia.org/wiki/Courbe_épidémique>

Examples

```
# library(EpiCurve)
date <- seq(as.timeDate("2017-05-10 21:35:22"), as.timeDate("2017-05-12 06:15:12"), by="12 min")
val <- rep(1, length(date))
tri <- rep(c("Alive", "Died","Unknown"), length.out=length(date))
DF <- data.frame(date, val, tri, stringsAsFactors=TRUE)
names(DF) <- c("date","value", "tri")


EpiCurve(DF,
         date = "date",
         freq = "value",
         period = "hour",
         split = 4,
         cutvar = "tri",
         ylabel="Number of cases",
         xlabel= "From 2017-05-10 21:35:22 To 2017-05-12 06:15:12",
         title = "Epidemic Curve")
```

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