Package ‘EpiCurve’

April 11, 2020

Type Package
Title Plot an Epidemic Curve
Version 2.3-1
Date 2020-04-10
Description Creates simple or stacked epidemic curves for hourly, daily, weekly or monthly outcome data.
License LGPL-3
Encoding UTF-8
LazyData true
Depends ggplot2, dplyr, ISOweek, scales, timeDate
Imports RCColorBrewer, 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 2020-04-11 15:00:03 UTC

R topics documented:

EpiCurve .......................................................... 2

Index 4
EpiCurve

Plot an Epidemic Curve

Description

This function plots 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)

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

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 formatted 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>
EpiCurve

References


Examples

```r
# 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")
```
Index

*Topic ~**documentation**

EpiCurve, 2

EpiCurve, 2