Package ‘wktmo’

August 31, 2017

Type  Package
Title  Converting Weekly Data to Monthly Data
Version  1.0.5
Date  2017-08-31
Description  Converts weekly data to monthly data.
             Users can use three types of week formats: ISO week, epidemiology week (epi week) and calendar date.
Depends  R (>= 3.4.0)
License  GPL-2
Encoding  UTF-8
LazyData  true
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Description

Returns the dates of a particular week. The week can be defined by ISO week or epi week.

Usage

dateFromWeek(year, wkIndex, wkMethod = "ISO")

Arguments

year a value for the year.
wkIndex a value for the week index of the year.
wkMethod a character string for the week-counting method. Default is "ISO" for ISOweek; other options are "epiSat", "epiSun" and "epiMon" for epi-week method defining Saturday, Sunday and Monday as the firstday in a week, respectively.

Value

a vector of length 7, containing all the dates in the week, with the format of yyyy-mm-dd.

Author(s)

You Li

See Also

weekToMonth

Examples

dateFromWeek(year = 2000, wkIndex = 20)
dateFromWeek(year = 2009, wkIndex = 53)
dateFromWeek(year = 2015, wkIndex = 1, wkMethod = "epiSun")
**weeklyFlu**

*Weekly influenza cases in 18 countries, 2010-2015*

**Description**

A dataset containing weekly influenza cases, including influenza A, influenza B and influenza A+B, in 18 countries during 2010-2015. Data are from FluNet, a global web-based tool for influenza virological surveillance.

**Usage**

weeklyFlu

**Format**

A data frame containing 5616 rows and 10 variables.

- **country**: country: Argentina, Australia, Brazil, Chile, China, Egypt, Germany, Ghana, Indonesia, Iran, Japan, Mongolia, Niger, Peru, Singapore, Thailand, Tanzania, Zambia
- **whoRegion**: WHO region
- **fluRegion**: influenza region
- **year**: year of data
- **isoWeek**: index of ISO week
- **startDat**: start date of the week
- **endDat**: end date of the week
- **fluA**: number of influenza A cases
- **fluB**: number of influenza B cases
- **fluAll**: number of influenza A+B cases

**Source**


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**weekToMonth**

*Convert weekly data to monthly data*

**Description**

Converts weekly data to monthly data. The start week or date is needed along with the data. The start week can be defined by ISO week or epi week.
Usage

weekToMonth(wkdata, year = NULL, wkIndex = NULL, wkMethod = "ISO",
            datStart = NULL, format = "%d-%m-%Y")

Arguments

wkdata a numeric vector for weekly data to be converted.
year a value for the year of the start of the data.
wkIndex a value for the week index of the start of the data if a week-counting method is used.
wkMethod a character string for the week-counting methods. Default is "ISO" for ISO-week; other options are "epiSat", "epiSun" and "epiMon" for epi-week method defining Saturday, Sunday and Monday as the first day in a week, respectively. In addition, users also have the option of specifying the start date of the data by "startDat" method.
datStart a character string for the start date of the data. If left blank, the date generated from the week-counting method will be applied.
format a character string specifying the input format for datStart.

Value

a dataframe containing two column vectors: yearMonth and value.

Author(s)

You Li

See Also

dateFromWeek

Examples

# extract data
data(weeklyFlu)
# subset data of interest, e.g. to convert weekly influenza A cases in China
weeklyData <- weeklyFlu$fluA[weeklyFlu$country == "China"]
# convert weekly data to monthly data;
# these two input methods below will return the same results.
monthlyData <- weekToMonth(weeklyData, year = 2010, wkIndex = 1, wkMethod = "ISO")
monthlyData <- weekToMonth(weeklyData, datStart = "04-01-2010", wkMethod = "startDat"
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