Package 'covid19.SPF'

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Type Package

Title COVID data from Santé Publique France

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Description Easy downloading of four datasets from Santé Publique France.

License GPL-3

NeedsCompilation no

Depends R (>= 4.0.0)

LazyLoad yes

LazyData yes

RoxygenNote 7.1.1

RemoteType github

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GithubUsername HervePerdry

GithubRef HEAD

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R topics documented:

`add.admissions` *Add an "admissions" column*

Description

Add an "admissions" column

Usage

```
add.admissions(X)
```

Arguments

`X`	a data frame

Details

Add a column with a the number of admissions, computed as `diff(X$hosp) + diff(X$rad) + diff(X$dc)`. Special care is given to the case of missing days.

Value

An identical data frame with an "admissions" column.

`agg` *Data aggregation*

Description

Data aggregation

Usage

```
agg(x, cols, by, FUN = sum, ...)
```

Arguments

x	a data frame
cols	the columns to aggregate
by	grouping elements
FUN	function used to aggregate the data
...	further parameters passed to ‘aggregate‘ or to ‘FUN‘

Details

This function is a convenient wrapper for aggregate. It is implemented as ‘aggregate(x[,cols], x[, by], FUN, ...)‘.

Value

a data frame, with the data in ‘x[,cols]\‘ aggregated according to the levels of the factors in ‘x[,by]‘.

Examples

```
agg(departements, cols = c("superficie", "population"), by = "région")
```

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as.dept *Creates a object of class* dept

Description

Creates a object of class dept

Usage

```
as.dept(x)
```

Arguments

x	a character vector

Details

The class dept allow to handle french départements. Methods have been implemented (in particular for xtfrm) to ensure that départements "2A" and "2B" are inserted between "19" and "21" when sorting an object of class dept.

Value

an object of class dept

departements *French départements*

Description

French départements

Usage

```
data(departements)
```

Format

data frame

Details

This dataset contains data about the French départements. The colmun names are self-documenting.

read.spf *Read Santé Publique France data*

Description

Read Santé Publique France data

Usage

```
read.spf(file = c("-", "nouveaux", "classe-age", "etablissements"))
```

Arguments

file	which file to read

Details

This function reads one the files described at https://www.data.gouv.fr/fr/datasets/donnees-hospitalieres-relat and do some cleaning.

Value

A data frame

Examples

```
cov <- read.spf("nouveaux")
cov <- agg(cov, 3:6, 2)
plot(cov$jour, cov$incid_rea, log = "y", type = "o")
lines(cov$jour, rolling.mean(cov$incid_rea), col = "red", lwd = 2)
```

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regions *French régions*

Description

French régions

Usage

```
data(regions)
```

Format

data frame

Details

This dataset contains the numerical codes for the French administrative regions.

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rolling.mean *Rolling mean*

Description

Rolling mean

Usage

```
rolling.mean(x, n = 7)
```

Arguments

x	a numeric vector
n	an integer
...	extra parameters for `filter`

Value

The rolling mean of x based on n points. This is just a wrapper for `as.vector(filter(x,rep(n,1/n),...))`.

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