Package ‘fpp3’

February 1, 2023

Title  Data for "Forecasting: Principles and Practice" (3rd Edition)

Version 0.5

Description  All data sets required for the examples and exercises in the book "Forecasting: principles and practice" by Rob J Hyndman and George Athanasopoulos <https://OTexts.com/fpp3/>. All packages required to run the examples are also loaded.

License  GPL-3

URL  https://github.com/robjhyndman/fpp3package,
     https://OTexts.com/fpp3/

BugReports  https://github.com/robjhyndman/fpp3package

Depends  R (>= 3.5.0)

Imports  cli (>= 1.0.0), crayon (>= 1.3.4), dplyr (>= 0.7.4), fable (>= 0.3.0), fabletools (>= 0.3.0), feasts (>= 0.1.7), ggplot2 (>= 3.1.1), lubridate (>= 1.7.4), magrittr (>= 1.5), purrr (>= 0.2.4), rstudioapi (>= 0.7), tibble (>= 1.4.2), tidyr (>= 0.8.3), tsibble (>= 0.9.3), tsibbledata (>= 0.2.0)

Encoding  UTF-8

LazyData  true

RoxygenNote  7.2.3

NeedsCompilation  no

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\texttt{aus_accommodation} & \textit{Australian accommodation data} \\
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\textbf{Description}

\texttt{aus_accommodation} is a quarterly 'tsibble' containing data on Australian tourist accommodation from short-term non-residential accommodation with 15 or more rooms, 1998 Q1 - 2016 Q2. The data set also contains the Australian Consumer Price Index (CPI) for the same period. Takings are in millions of Australian dollars, Occupancy is a percentage of rooms occupied, CPI is an index with value 100 in 2012 Q1.

\textbf{Format}

Time series of class 'tsibble'

\textbf{Source}

Australian Bureau of Statistics, Cat No 8635.0, Table 10, and Cat No 6401.0, Table 1.

\textbf{Examples}

\texttt{aus_accommodation}
aus_airpassengers

| aus_airpassengers | Air Transport Passengers Australia |

**Description**
Total annual air passengers (in millions) including domestic and international aircraft passengers of air carriers registered in Australia. 1970-2016.

**Format**
Annual time series of class ‘tsibble’.

**Source**
World Bank.

**Examples**

aus_airpassengers

aus_arrivals

| aus_arrivals | International Arrivals to Australia |

**Description**
Quarterly international arrivals to Australia from Japan, New Zealand, UK and the US. 1981Q1 - 2012Q3.

**Format**
Quarterly time series of class ‘tsibble’.

**Source**
Tourism Research Australia.

**Examples**

aus_arrivals
bank_calls

Call volume for a large North American commercial bank

Description
Five-minute call volume handled on weekdays between 7:00am and 9:05pm, beginning 3 March and 24 October 2003 (164 days).

Format
Time series of class ‘tsibble’ at 5 minute intervals.

Source
Jonathan Weinberg

References

Examples

bank_calls

boston_marathon

Boston marathon winning times since 1897

Description
Winning times for events at the Boston Marathon. 1897-2019.

Format
Annual time series of class ‘tsibble’.

Source

Examples

boston_marathon
### canadian_gas

**Monthly Canadian gas production**

**Description**

Monthly Canadian gas production, billions of cubic metres, January 1960 - February 2005

**Format**

Monthly time series of class 'tsibble'.

**Source**


**References**

[http://www.exponentialsmoothing.net](http://www.exponentialsmoothing.net)

**Examples**

```r
canadian_gas
```

### fpp3_conflicts

**Conflicts between fpp3 packages and other packages**

**Description**

This function lists all the conflicts between packages in the fpp3 collection and other packages that you have loaded.

**Usage**

```r
fpp3_conflicts()
```

**Details**

Some conflicts are deliberately ignored: `intersect`, `union`, `setequal`, and `setdiff` from dplyr; and `intersect`, `union`, `setdiff`, and `as.difftime` from lubridate. These functions make the base equivalents generic, so shouldn’t negatively affect any existing code.

**Value**

A list object of class `fpp3_conflicts`. 
Examples
fpp3_conflicts()

fpp3_packages

List all packages loaded by fpp3

Description
List all packages loaded by fpp3

Usage
fpp3_packages(include_self = FALSE)

Arguments

include_self Include fpp3 in the list?

Value
A character vector of package names.

Examples
fpp3_packages()

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guinea_rice

Rice production (Guinea)

Description
Total annual rice production (million metric tons) for Guinea. 1970-2011.

Format
Annual time series of class 'tsibble'.

Source
World Bank.

Examples

guinea_rice
### insurance

*Insurance quotations and advertising expenditure*

**Description**


**Format**

Monthly time series of class ‘tsibble’.

**Source**

Kindly provided by Dave Reilly, Automatic Forecasting Systems.

**Examples**

```r
insurance %>%
  ggplot(aes(x=TVadverts, y=Quotes)) + geom_point()
```

### prices

*Price series for various commodities*

**Description**

Annual prices for eggs, chicken, copper, nails, oil and wheat. Eggs, chicken, nails, oil and copper in $US; wheat in British pounds. All prices adjusted for inflation.

**Format**

Annual time series of class ‘tsibble’.

**Source**


**Examples**

```r
prices %>% autoplot(wheat)
```
souvenirs  
*Sales for a souvenir shop*

**Description**

Monthly sales for a souvenir shop on the wharf at a beach resort town in Queensland, Australia.

**Format**

Monthly time series of class ‘tsibble’.

**Source**


**Examples**

```r
souvenirs %>% autoplot(Sales)
```

---

**us_change**  
*Percentage changes in economic variables in the USA.*

**Description**

us_change is a quarterly ‘tsibble’ containing percentage changes in quarterly personal consumption expenditure, personal disposable income, production, savings and the unemployment rate for the US, 1970 to 2016. Original $ values were in chained 2012 US dollars.

**Format**

Time series of class ‘tsibble’

**Source**

Federal Reserve Bank of St Louis.

**Examples**

```r
us_change
```
us_employment

| us_employment | US monthly employment data |

Description

us_employment is a monthly ‘tsibble’ containing US employment data from January 1939 to June 2019. Each ‘Series_ID’ represents different sectors of the economy.

Format

Time series of class ‘tsibble’

Source

U.S. Bureau of Labor Statistics

Examples

us_employment

us_gasoline

| us_gasoline | US finished motor gasoline product supplied. |

Description

Weekly data beginning Week 6, 1991, ending Week 3, 2017. Units are "million barrels per day".

Format

Time series object of class ‘tsibble’.

Source

US Energy Information Administration.

Examples

us_gasoline
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