Package `learnrbook`

August 26, 2020

Type Package

Title Datasets for P. J. Aphalo's "Learn R" Book

Version 1.0.1

Date 2020-08-19

Maintainer Pedro J. Aphalo <pedro.aphalo@helsinki.fi>

Description Data used in code examples in the book "Learn R: As a Language" by Pedro J. Aphalo. ISBN 9780367182533 (pbk); ISBN 9780367182557 (hb); ISBN 9780429060342 (ebk).

License GPL (>= 2)

LazyLoad yes

LazyData yes

ByteCompile yes

Depends R (>= 3.6.0)

Suggests roxygen2 (>= 6.0.1), knitr (>= 1.15.1), devtools (>= 1.12.0), markdown (>= 1.5)

URL https://docs.r4photobiology.info/learnrbook/

BugReports https://bitbucket.org/aphalo/learnrbook-pkg/issues

Encoding UTF-8

VignetteBuilder knitr

RoxygenNote 7.1.1

NeedsCompilation no

Author Pedro J. Aphalo [aut, cre] (<https://orcid.org/0000-0003-3385-972X>)

Repository CRAN

Date/Publication 2020-08-25 22:10:02 UTC
learnrbook-package

R topics documented:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>learnrbook-package</td>
<td>2</td>
</tr>
<tr>
<td>clean1000.df</td>
<td>3</td>
</tr>
<tr>
<td>clean5000.df</td>
<td>3</td>
</tr>
<tr>
<td>pkgs_all</td>
<td>4</td>
</tr>
<tr>
<td>pkgs_ch_data</td>
<td>5</td>
</tr>
<tr>
<td>pkgs_ch_data_io</td>
<td>5</td>
</tr>
<tr>
<td>pkgs_ch_graphics</td>
<td>6</td>
</tr>
<tr>
<td>viikki_d29.dat</td>
<td>6</td>
</tr>
<tr>
<td>weather_wk_25_2019.tb</td>
<td>7</td>
</tr>
</tbody>
</table>

Index 9

learnrbook-package  learnrbook: Datasets for P. J. Aphalo's "Learn R" Book

Description

Data used in code examples in the book "Learn R: As a Language" by Pedro J. Aphalo. ISBN 9780367182533 (pbk); ISBN 9780367182557 (hbk); ISBN 9780429060342 (ebk).

Details

Package 'learnr' is a companion to the book Aphalo, P. (2020). Learn R. New York: Chapman and Hall/CRC, ISBN 9780367182533”. This package supplies a list of all the packages used in the book. It also contains all the original data sets used in the book.

Author(s)

Maintainer: Pedro J. Aphalo <pedro.aphalo@helsinki.fi> (ORCID)

See Also

Useful links:

- [https://docs.r4photobiology.info/learnrbook/](https://docs.r4photobiology.info/learnrbook/)
- Report bugs at [https://bitbucket.org/aphalo/learnrbook-pkg/issues](https://bitbucket.org/aphalo/learnrbook-pkg/issues)
**clean1000.df**

*Subset of RNAseq gene expression data*

**Description**

A data set containing the results from the analysis of data from RNAseq. Subset of 1000 genes.

**Usage**

`clean1000.df`

**Format**

A data.frame with 5 columns and 1000 row names.

**Details**

The variables are as follows:

- logFC (numeric)
- logCPM (numeric)
- LR (numeric)
- Pvalue (numeric)
- outcome (-1, 0, +1)

**Note**

A subset of size 1000 selected by random sampling.

**References**


---

**clean5000.df**

*Subset of RNAseq gene expression data*

**Description**

A data set containing the results from the analysis of data from RNAseq. Subset of 5000 genes.

**Usage**

`clean5000.df`
pkgs_all

Format

A data.frame with 5 columns and 5000 row names.

Details

The variables are as follows:

• logFC (numeric)
• logCPM (numeric)
• LR (numeric)
• Pvalue (numeric)
• outcome (-1, 0, +1)

Note

A subset of size 5000 selected by random sampling.

References


pkgs_all

Packages used in book "Learn R: As a Language"

Description

Character vector of package names for the whole book.

Usage

pkgs_all

Format

A vector of character strings.

Examples

pkgs_all
pkgs_ch_data

Description
Character vector of package names for chapter 6 "New grammars of data".

Usage
pkgs_ch_data

Format
A vector of character strings.

Examples
pkgs_ch_data

pkgs_ch_data_io

Description
Character vector of package names for chapter 8 "Data import and export".

Usage
pkgs_ch_data_io

Format
A vector of character strings.

Examples
pkgs_ch_data_io
Description

Character vector of package names for chapter 7 "Grammar of graphics".

Usage

pkgs_ch_graphics

Format

A vector of character strings.

Examples

pkgs_ch_graphics

viikki_d29.dat

Wind direction and speed data

Description

A data set containing wind speed and direction measured in Viikki, Helsinki, Finland with a Vaisala Weather Transmitter WXT530 (sonic anemometer) during 2016-07-29 at 1 min interval.

Usage

viikki_d29.dat

Format

A tibble with 3 columns and 1440 rows.

Details

The variables are as follows:

- solar_time (yyyy-mm-dd hh:mm:ss)
- WindDir_D1_WVT (degrees)
- WindSpd_S_WVT (m/s)

References

P. J. Aphalo, unpublished data.
weather wk 25 2019.tb

Examples

names(viikki_d29.dat)
viikki_d29.dat

Description

A data set containing weather data measured in Viikki, Helsinki, Finland. Values for all variables are means of 12 readings at 5 seconds intervals. Sun angles were computed with R package 'photobiology'.

Usage

weather wk 25 2019.tb

Format

A tibble with 21 columns and 10080 rows.

Details

The variables are as follows:

- time (yyyy-mm-dd hh:mm:ss)
- PAR_umol (umol m^{-2} s^{-1})
- PAR_diff_fr (/1)
- global_watt (W m^{-2})
- day_of_year
- month_of_year
- month_name
- calendar_year
- solar_time (h)
- sun_elevation (degrees above horizon)
- sun_azimuth (degrees)
- was_sunny (T/F)
- wind_speed (m s^{-1})
- wind_direction (degrees)
- air_temperature_C (C)
- air_RH (C)
- air_DP (C)
• air_pressure
• red_umol (umol m^{-2} s^{-1})
• far_red_umol (umol m^{-2} s^{-1})
• red_far_red (ratio)

References

P. J. Aphalo, unpublished data.

Examples

names(weather_wk_25_2019.tb)
weather_wk_25_2019.tb
Index

* datasets
  clean1000.df, 3
  clean5000.df, 3
  pkgs_all, 4
  pkgs_ch_data, 5
  pkgs_ch_data_io, 5
  pkgs_ch_graphics, 6
  viikki_d29.dat, 6
  weather_wk_25_2019.tb, 7

clean1000.df, 3
clean5000.df, 3

learnrbook (learnrbook-package), 2
learnrbook-package, 2

pkgs_all, 4
pkgs_ch_data, 5
pkgs_ch_data_io, 5
pkgs_ch_graphics, 6

viikki_d29.dat, 6

weather_wk_25_2019.tb, 7