

Package ‘learnrbook’

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Type Package

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

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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).

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),
rmarkdown (>= 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

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Repository CRAN

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learnrbook-package	<i>learnrbook: Datasets for P. J. Aphalo's "Learn R" Book</i>
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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)

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See Also

Useful links:

- <https://docs.r4photobiology.info/learnrbook/>
- Report bugs at <https://bitbucket.org/aphalo/learnrbook-pkg/issues>

clean1000.df	<i>Subset of RNAseq gene expression data</i>
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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

Neha Rai et al. (2020) Plant Cell and Environment, <https://doi.org/10.1111/pce.13752>.

clean5000.df	<i>Subset of RNAseq gene expression data</i>
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Description

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

Usage

```
clean5000.df
```

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

Neha Rai et al. (2020) Plant Cell and Environment, <https://doi.org/10.1111/pce.13752>.

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*Packages used in Ch. 6 of book "Learn R: As a Language"*

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*Packages used in ch. 8 of book "Learn R: As a Language"*

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

pkgs_ch_graphics	<i>Packages used in ch. 7 of book "Learn R: As a Language"</i>
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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	<i>Wind direction and speed data</i>
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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.

Examples

```
names(viikki_d29.dat)
viikki_d29.dat
```

```
weather_wk_25_2019.tb  Weather data
```

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 (
- 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
```


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