

Package: actogrammr (via r-universe)

August 23, 2024

Type Package

Title Read in Activity Data and Plot Actograms

Version 0.2.3

Description Read in activity measurements from standard file formats used by circadian rhythm researchers, currently only 'ClockLab' format, and process and plot the data. The central type of plot is the actogram, as first described by in ``Activity and distribution of certain wild mice in relation to biotic communities'' by MS Johnson (1926) <[doi:10.2307/1373575](https://doi.org/10.2307/1373575)>.

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Encoding UTF-8

LazyData true

RoxygenNote 6.0.1

Suggests testthat, covr

Imports dplyr, ggplot2, lubridate, readr, tidyr

Repository <https://rcorty.r-universe.dev>

RemoteUrl <https://github.com/rcorty/actogrammr>

RemoteRef HEAD

RemoteSha f79c73f233f267b10ff14bb381441baf15ac5bdd

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bin_data	<i>bin_data</i>
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Description

function to bin data time-wise

Usage

```
bin_data(data, minutes_per_bin)
```

Arguments

data	the activity data to bin
minutes_per_bin	number of minutes per bin

Value

the data, after binning

Examples

```
f <- file.path(system.file(package = 'actogrammr'), 'testdata')
d <- read_clock_lab_file(file_name = list.files(path = f, full.names = TRUE)[1])
b <- bin_data(data = d, minutes_per_bin = 6)
```

plot_actogram	<i>plot_actogram</i>
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Description

plots an actogram

Usage

```
plot_actogram(data, start_date = min(data$date), end_date = max(data$date))
```

Arguments

data	the activity data to plot
start_date	the start time
end_date	the end time

Value

the plot

Examples

```
f <- file.path(system.file(package = 'actogrammr'), 'testdata')
d <- read_clock_lab_file(file_name = list.files(path = f, full.names = TRUE)[1])
b <- bin_data(data = d, minutes_per_bin = 6)
## Not run:
plot_actogram(data = b, start_date = '2010-01-01')

## End(Not run)
```

read_clock_lab_file *read_clock_lab_file*

Description

reads a binary file in clocklab format

Usage

```
read_clock_lab_file(file_name)
```

Arguments

`file_name` the name of the file to read, should represent one mouse. Should be the result of a call to `list.files(..., full.names = TRUE)`

Value

a big data.frame

Examples

```
f <- file.path(system.file(package = 'actogrammr'), 'testdata')
d <- read_clock_lab_file(file_name = list.files(path = f, full.names = TRUE)[1])
```

read_clock_lab_files *read_clock_lab_files*

Description

reads binary files in clocklab format

Usage

```
read_clock_lab_files(file_names)
```

Arguments

`file_names` the names of the files to read. Should be the result of a call to `list.files(..., full.names = TRUE)`

Value

a big data.frame

Examples

```
f <- file.path(system.file(package = 'actogrammr'), 'testdata')
d <- read_clock_lab_files(file_names = list.files(path = f, full.names = TRUE))
```

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