

# Package ‘actogrammr’

October 25, 2017

**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>.

**License** GPL-3

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 6.0.1

**Suggests** testthat, covr

**Imports** dplyr, ggplot2, lubridate, readr, tidyr

**NeedsCompilation** no

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**Repository** CRAN

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bin\_data

*bin\_data*

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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_files(file_names = list.files(path = f, full.names = TRUE))  
b <- bin_data(data = d, minutes_per_bin = 6)
```

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plot\_actogram

*plot\_actogram*

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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_files(file_names = list.files(path = f, full.names = TRUE))
b <- bin_data(data = d, minutes_per_bin = 6)
## Not run:
plot_actogram(data = b, start_date = '2010-01-01')

## End(Not run)
```

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read\_clock\_lab\_files    *read\_clock\_lab\_files*

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**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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