Package 'rblt'

February 19, 2024

Type Package

Title Bio-Logging Toolbox

Version 0.2.4.7

Description
An R-shiny application to visualize bio-loggers time series at a microsecond precision as Acceleration, Temperature, Pressure, Light intensity. It is possible to link behavioral labels extracted from 'BORIS' software <http://www.boris.unito.it> or manually written in a csv file.

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License GPL (>= 3)

Encoding UTF-8

RoxygenNote 6.1.1

SystemRequirements libhdf5 (>= 1.8.12)

Depends R (>= 3.2), hdf5r (>= 1.0), data.table, xts, dygraphs, shiny, methods

Imports tools

URL https://github.com/sg4r/rblt

BugReports https://github.com/sg4r/rblt/issues

Suggests knitr, rmarkdown

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

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R topics documented:

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axytrek2h5   *A axytrek2h5 function for convert csv file to h5 file*

Description

A axytrek2h5 function for convert csv file to h5 file

Usage

```
axytrek2h5(filecsv = "", accres = 25, fileh5 = "")
```

Arguments

filecsv   A input axytrek csv file.

accres   input number of data rate in 1 seconde

fileh5   A output h5 data file.

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cats2h5 *A cats2h5 function for convert csv file to h5 file*

Description

A cats2h5 function for convert csv file to h5 file

Usage

```
cats2h5(filecsv = "", accres = 50, fileh5 = "")
```

Arguments

filecsv	A input cats csv file.
accres	input resolution
fileh5	A output h5 data file.

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demoaxytrek2h5 *A demoaxytrek2h5 function build demo cats h5 file*

Description

A demoaxytrek2h5 function build demo cats h5 file

Usage

```
demoaxytrek2h5(fileh5 = "", nbrow = 10000)
```

Arguments

fileh5	input data H5 file
nbrow	number of row

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democats2h5   *A democats2h5 function build demo cats h5 file*

Description

A democats2h5 function build demo cats h5 file

Usage

```
democats2h5(fileh5 = "", nbrow = 10000)
```

Arguments

fileh5	imput data h5 file
nbrow	number of row

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democatsmkbe   *A democatsmkbe function for generate ramdom data*

Description

A democatsmkbe function for generate ramdom data

Usage

```
democatsmkbe(fbe = "", nbrow = 10, nbseq = 2)
```

Arguments

fbe	A outout be csv file.
nbrow	input number of data rate in 1 seconde
nbseq	input sequence lenght

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demolul2h5	*A demolul2h5 function build demo lul h5 file*

Description

A demolul2h5 function build demo lul h5 file

Usage

```
demolul2h5(fileh5 = "", nbrow = 10000)
```

Arguments

fileh5	A h5 data file.
nbrow	number of row

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demowacu2h5	*A demowacu2h5 function build demo cats h5 file*

Description

A demowacu2h5 function build demo cats h5 file

Usage

```
demowacu2h5(fileh5 = "", nbrow = 10000)
```

Arguments

fileh5	A h5 data file.
nbrow	number of row

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demo_gui	*A demow_gui function for lunch a R-shiny application to plot datalogger view*

Description

A demow_gui function for lunch a R-shiny application to plot datalogger view

Usage

```
demo_gui()
```

`Logger-class`　　　　　　　　*A Logger reference class*

Description

A Logger reference class

Fields

`name` logger display name

`fileh5` h5 data file name

`filebehavior` behavior file name

`besep` behavior field separator character

`besaturation` the 'saturation' value from 0 to 1

`uizoomstart` uizoomstart default value

`uizoomend` uizoomend default value

Methods

`behaviorinit(besep, besaturation)` init behavior list event

`draw()` draw the objec value

　　　　Return Value: returns a String object representing the value

`h5init()` verify if h5 is correct version

`initmetriclst()` set metric list for this logger class

`setextmatrix(m)` set external matrix

Author(s)

sebastien geiger

`LoggerAxytrek-class`　　　　*A LoggerAxytrek reference class*

Description

A LoggerAxytrek reference class

Methods

`draw()` draw the objec value

　　　　Return Value: returns a String object representing the value

`h5init()` verify if h5 is correct version

`initmetriclst()` set metric list for this logger class

`LoggerCats-class`   *A LoggerCats reference class*

Description

A LoggerCats reference class

Methods

`draw()` draw the objec value

> **Return Value:** returns a String object representing the value

`h5init()` verify if h5 is correct version

`initmetriclst()` set metric list for this logger class

`LoggerData-class`   *A LoggerData reference class*

Description

A LoggerData reference class

Methods

`draw()` draw the objec value

> **Return Value:** returns a String object representing the value

`h5init()` verify if h5 is correct version

`initmetriclst()` set metric list for this logger class

`LoggerList-class`   *A LoggerList reference class*

Description

A LoggerList reference class

Methods

`add(node)` add new node in the list.

`draw()` draw the objec value

> **Return Value:** returns a list of String object representing the value

LoggerLul-class   *A LoggerLul reference class*

Description

A LoggerLul reference class

Methods

draw() draw the objec value

> **Return Value:** returns a String object representing the value

h5init() verify if h5 is correct version

initmetriclst() set metric list for this logger class

LoggerUI-class   *A LoggerUI reference class*

Description

A LoggerUI reference class

Fields

loglst list of logger class

id id of curent loger view

ldatestart curent start date

nbrow courent row number

zoomhistory history storage

Methods

gui() plot logger list

LoggerWacu-class   *A LoggerWacu reference class*

Description

A LoggerWacu reference class

Methods

draw() draw the objec value

    Return Value: returns a String object representing the value

h5init() verify if h5 is correct version

initmetriclst() set metric list for this logger class

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lul2h5   *A lul2h5 function for concert lul csv file to h5 file*

Description

A lul2h5 function for concert lul csv file to h5 file

Usage

```
lul2h5(filecsv = "", fileh5 = "", sep = "\t")
```

Arguments

filecsv	A input LUL csv file.
fileh5	A output h5 data file.
sep	input the field separator character.

`Metric-class` *Metric reference class*

Description

Metric reference class

Fields

`name` title metric in chart

`colid` start column id

`connb` number of column for this metric

Methods

`draw()` draw the objec value

> **Return Value:** returns a String object representing the value

`getmatrix(id)` get matrix of elements

`MetricList-class` *MetricList reference class*

Description

MetricList reference class

Methods

`add(node)` add new node in the list.

`draw()` draw the objec value

> **Return Value:** returns a list of String object representing the value

`get()` get all node from the list.

> **Return Value:** returns a list of node

`getat(id)` return element at id index.

> **Return Value:** returns the node @ id

`getcolactive()` get matrix col enable

`getcolnames()` get matrix col name

`getmatrix()` get matrix of elements

`getsize()` return lenght of element.

> **Return Value:** returns a non-negativ numeric

`slctset(v)` enable or disable metric view

> **Parameters:**
> - v True or False vector

OldLoggerUI-class   *A OldLoggerUI reference class*

Description

A OldLoggerUI reference class

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wacu2h5   *A wacu2h5 function for concert wacu csv file to h5 file*

Description

A wacu2h5 function for concert wacu csv file to h5 file

Usage

```
wacu2h5(filecsv = "", fileh5 = "", rtctick = 1, accres = 50,
  datestartstring = "")
```

Arguments

filecsv   A input WACU csv file.

fileh5   A output h5 data file.

rtctick   tpl frequence

accres   acc frequence

datestartstring

                  A Date string in GMT

ZoomHistory-class   *A ZoomHistory reference class*

Description

A ZoomHistory reference class

Methods

draw() draw the objec value

      Return Value: returns a matrix of value

pop() pop one history position

push(s, e) push new history position in array.

Index