

# Package ‘rblt’

October 14, 2022

**Type** Package

**Title** Bio-Logging Toolbox

**Version** 0.2.4.5

**Description** An R-shiny application to plot datalogger time series at a microsecond precision as Acceleration, Temperature, Pressure, Light intensity from CATS, AXY-TREK LUL and WACU bio-loggers. It is possible to link behavioral labels extracted from 'BORIS' software <<http://www.boris.unito.it>> or manually written in a csv file. CATS bio-logger are manufactured by <<http://www.cats.is>>, AXY-TREK are manufactured by <<http://www.technosmart.eu>> and LUL and WACU are manufactured by <<http://www.iphc.cnrs.fr/-MIBE-.html>>.

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**License** GPL (>= 3)

**Encoding** UTF-8

**LazyData** true

**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:

axytrek2h5 . . . . .	2
cats2h5 . . . . .	3
demoaxytrek2h5 . . . . .	3
democats2h5 . . . . .	4
democatsmkbe . . . . .	4
demolul2h5 . . . . .	5
demowacu2h5 . . . . .	5
demo_gui . . . . .	5
Logger-class . . . . .	6
LoggerAxytrek-class . . . . .	6
LoggerCats-class . . . . .	7
LoggerData-class . . . . .	7
LoggerList-class . . . . .	7
LoggerLul-class . . . . .	8
LoggerUI-class . . . . .	8
LoggerWacu-class . . . . .	9
lul2h5 . . . . .	9
Metric-class . . . . .	10
MetricList-class . . . . .	10
OldLoggerUI-class . . . . .	11
wacu2h5 . . . . .	11
ZoomHistory-class . . . . .	11
<b>Index</b>	<b>12</b>

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axytrek2h5	<i>A axytrek2h5 function for convert csv file to h5 file</i>
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### 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	<i>A cats2h5 function for convert csv file to h5 file</i>
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**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	<i>A demoaxytrek2h5 function build demo cats h5 file</i>
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**Description**

A demoaxytrek2h5 function build demo cats h5 file

**Usage**

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

**Arguments**

fileh5	input data H5 file
nbrow	number of row

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	input data h5 file
nbrow	number of row

---

democatsmkbe                    *A democatsmkbe function for generate ramdom data*

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**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	<i>A demolul2h5 function build demo lul h5 file</i>
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**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	<i>A demowacu2h5 function build demo cats h5 file</i>
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**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	<i>A demow_gui function for lunch a R-shiny application to plot datalogger view</i>
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**Description**

A demow\_gui function for lunch a R-shiny application to plot datalogger view

**Usage**

```
demo_gui()
```

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Logger-class      *A Logger reference class*

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### 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

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LoggerAxytrek-class      *A LoggerAxytrek reference class*

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### 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

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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

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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

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LoggerList-class      *A LoggerList reference class*

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**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

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LoggerLul-class      *A LoggerLul reference class*

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**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

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LoggerUI-class      *A LoggerUI reference class*

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**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



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LoggerWacu-class	<i>A LoggerWacu reference class</i>
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**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	<i>A lul2h5 function for concert lul csv file to h5 file</i>
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**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.

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Metric-class	<i>Metric reference class</i>
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**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

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MetricList-class	<i>MetricList reference class</i>
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**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

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OldLoggerUI-class      *A OldLoggerUI reference class*

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### Description

A OldLoggerUI reference class

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

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### 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*

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### 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

axytrek2h5, 2

cats2h5, 3

demo\_gui, 5

demoaxytrek2h5, 3

democats2h5, 4

democatsmkbe, 4

demolul2h5, 5

demowacu2h5, 5

Logger (Logger-class), 6

Logger-class, 6

LoggerAxytrek (LoggerAxytrek-class), 6

LoggerAxytrek-class, 6

LoggerCats (LoggerCats-class), 7

LoggerCats-class, 7

LoggerData (LoggerData-class), 7

LoggerData-class, 7

LoggerList (LoggerList-class), 7

LoggerList-class, 7

LoggerLul (LoggerLul-class), 8

LoggerLul-class, 8

LoggerUI (LoggerUI-class), 8

LoggerUI-class, 8

LoggerWacu (LoggerWacu-class), 9

LoggerWacu-class, 9

lul2h5, 9

Metric (Metric-class), 10

Metric-class, 10

MetricList (MetricList-class), 10

MetricList-class, 10

OldLoggerUI (OldLoggerUI-class), 11

OldLoggerUI-class, 11

wacu2h5, 11

ZoomHistory (ZoomHistory-class), 11

ZoomHistory-class, 11