Package: miscYAPS (via r-universe)

September 7, 2024

Title Miscellaneous data and helper functions for using YAPS

Version 0.0.0.9000

Description Provides a bit of data and helper functions for wrapping around the key YAPS functions. The main function is swim_yaps, which will allow you to pass a data.table that is formatted with columns ts, epo, frac, tag, serial to the function. You must have a synchronisation model already available that is named sync_model and a data.table object for the hydrophones and their locations named hydros, as per the YAPS specifications. You should be familiar with YAPS in order to use this package but it will hopefully help make your life easier by looping through YAPS runs N (user specified number) of times and taking the best fit among those runs for each fish day. You will also find some data in the package to help you try.

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Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.3

Imports beepr, cli (>= 3.6.0), glue (>= 1.6.2), lifecycle (>= 1.0.3), rlang (>= 1.0.6), withr (>= 2.5.0), purrr, yaps, dplyr, tidyr, lubridate, data.table, magrittr, gridExtra

Remotes baktoft/yaps

Depends R (>= 2.10)

LazyData true

Repository https://mhpob.r-universe.dev

RemoteUrl https://github.com/robertlennox/miscYAPS

RemoteRef HEAD

RemoteSha a9b579d334db8fe77242371a85af17b7f31ff1b1

Contents

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swim_yaps	*functions to get receiver and tagging metadata into session*

Description

functions to get receiver and tagging metadata into session

Usage

```
swim_yaps(fish_detections, runs, rbi_min, rbi_max)
```

Arguments

fish_detections

the data frame with the fish detections including epo and frac

runs	number of times to refit the model
rbi_min	the minimum random burst interval of the transmitter
rbi_max	the maximum random burst interval of the transmitter

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sync	*functions to get receiver and tagging metadata into session*

Description

functions to get receiver and tagging metadata into session

Arguments

hydros	the hydrophone data frame as a data.table
detections	a data.table of the sync tag detections
ss_data	a data.table of the speed of sound data formatted using yaps::tempToSs
HOW_THIN	is the number for the eps_threshold.. smaller makes a thinner distribution default is 50
keep_rate	what proportion of sync tag detections do you want to retain, default is 1 (100%)
timekeeper	is the idx of the most perfectly fixed hydrophone; refer to hydros data.table for idx numbers

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yaps_all *functions to get receiver and tagging metadata into session*

Description

functions to get receiver and tagging metadata into session

Arguments

fish_detections

the data frame with the fish detections including epo and frac

rbi_min the minimum random burst interval of the transmitter

rbi_max the maximum random burst interval of the transmitter

runs number of times to refit the model

silent do you want to hide all the TMB code running? Default is yes (TRUE)

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