

1 Can we use reallocated logbooks data to map species distribution habitats?

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Abstract

One or two sentences providing a **basic introduction** to the field, comprehensible to a scientist in any discipline.

Two to three sentences of **more detailed background**, comprehensible to scientists in related disciplines.

One sentence clearly stating the **general problem** being addressed by this particular study.

One sentence summarizing the main result (with the words “**here we show**” or their equivalent).

Two or three sentences explaining what the **main result** reveals in direct comparison to what was thought to be the case previously, or how the main result adds to previous knowledge.

One or two sentences to put the results into a more **general context**.

Two or three sentences to provide a **broad perspective**, readily comprehensible to a scientist in any discipline.

Keywords: keywords

Word count: X

Can we use reallocated logbooks data to map species distribution habitats?

To do:

- email to Kasper
- redaction of M&M
- run single square simulations
- run multiple square simulations

Material and methods

Model

See `3_formulas.rmd`.

Simulation-estimation

Single-square simulations. How many simulations? 100 or more?

How do we simulate the covariate?

Still some lack of convergence.

Number of pings | nu: 1|10 10|100 100|1000

Size within a fishing sequence: radius = 3

Number of fishing zones: 1|3|5

Multiple-squares simulations. How do we simulate the covariate?

48 **Case-study: sole of the Bay of Biscay**

49 **Results**

50 **Single square analysis**

51 **Discussion**

References

Table 1

Percentage of convergence for each simulation/model configuration

Nb samples	Fishing sequence	Reallocation	Likelihood level	Convergence (%)
10	1	No	Yi	99.668
10	1	Yes	Yi	0.333
10	1	Yes	Dj	0.000
100	10	No	Yi	100.000
100	10	Yes	Yi	100.000
100	10	Yes	Dj	92.000
1000	100	No	Yi	100.000
1000	100	Yes	Yi	100.000
1000	100	Yes	Dj	97.333