

Species distribution models (SDM)

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Chapter 1

About

This is a short tutorial for constructing species distribution models in R. It describes the whole process from downloading OBIS and GBIF data, generating pseudo-absence data, including environmental data, fitting the model, validating the model and generating the resulting maps for visualization.

The code is available in AZTI's github repository repository and the book is readily available [here](#).

Chapter 2

Introduction

Some introduction about SDMs

Chapter 3

Data preparation

Bla bla bla

3.1 Download presence data

3.2 Create pseudo-absence data

3.3 Download environmental data

3.4 Final data set

Chapter 4

Model fit

Some introduction about SDMs

4.1 Generalised linear models

4.2 Generalised additive models

4.3 Shape-constrained generalised additive models

One citation is [Citores et al., 2020]

Chapter 5

Model selection

Bla bla

Chapter 6

Model validation

Bla bla

Chapter 7

Prediction and maps

predict from fitted models and produce maps

Bibliography

L. Citores, L. Ibaibarriaga, D. J. Lee, M. J. Brewer, M. Santos, and G. Chust. Modelling species presence–absence in the ecological niche theory framework using shape-constrained generalized additive models. *Ecological Modelling*, 418:108926, 2020.