Introduction to species distribution modeling

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Lecturers

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Course overview

Ecological Niche Modeling (ENM) and Species Distribution Modeling (SDM) using the R programming language. This course assumes basic R knowledge.

In the first # days, etc.

A basic knowledge of Geographic Information Systems is required for ENM/SDM. I will introduce basic concepts and operations of of GIS, but this is not a course about GIS.

Learning objectives

▶ Understand the theory behind ENM/SDM.
▶ Perform ENM/SDM in R.
▶ Apply ENM/SDM to real data.
▶ Produce maps.

Material

The material of this course is hosted at asd. It consists of:

- Lectures.
- Labs.
- Slides.

Software

The only package that we will use is `terra`. You might want to install also `codetools`, which performs checks on the C++ code of `terra`.

```r
install.packages(c("codetools", "terra", "randomForest"))
```

> **ℹ Note**
>
> `terra` is still in active development and some functionalities change with newer releases.