Navigation in the Ecological Space

2 - Assessing Explanatory Variables

Terms

2nd - 3rd February 2024

- 09:00 12:00 Morning Session
- 13:30 16:30 Afternoon Session

University of Potsdam, Maulberallee 1, room to be announced.

Trainers

- · Miguel Alvarez
- Ildikó Orbán

Description

Assessing vegetation species composition as a response to environmental factors is not trivial, as most common modelling approaches are restricted to a single response variable and not multiple responses. Multivariate statistics, including direct ordination analysis (redundancy analysis and canonical correspondence analysis), are tools to address this problem.

In this workshop we will focus on direct estimation of the importance of environmental variables in determining species composition, and will also cover methods such as the PERMANOVA test and the Canonical Test on Principal Coordinates.

Data analysis will be carried out using the statistical programming language R, exploiting its capabilities for explanatory evaluation and reproducible analysis. Only basic knowledge and little experience in programming with R is required.

Workshop Modality

The workshop will be conducted in the Life Coding modality and will include impulse talks, exercises and coaching. Teaching material will be provided in digital form. Each participant will use their own laptop and will be responsible for installing the necessary software (instructions will be distributed to registered participants).