



Forest Modeling Exercises

Process based and empirical modeling

Olalla Díaz-Yáñez^{1,*}, Laura Dobor^{2,*}, Katarina^{2,*} and Mats Nieberg^{2,*}

1. ETH Zurich
2. your institution

* *Correspondence:* Olalla Díaz-Yáñez olalla.diaz@usys.ethz.ch *

Correspondence: Laura Dobor youremail@.com *

Correspondence: Katarina youremail@.com * *Correspondence:* Mats Nieberg youremail@.com



Interdisciplinary Summer School
Ljubljana 2023
Repository available in GitHub

Table of contents

1	Overview	1
2	Data	2

1 Overview

In this session, we will cover two examples of how to create two models based on observed data. We will use two approaches Generalized Linear Models (GLMs) and Boosted Regression trees (BRTs). In this document we describe both of them, but your group has been assigned to one of these approaches. Each group have two questions to be answered (one question per subgroup inside each group). Please contact your group coach if you have questions on what is the specific task of your group/subgroup.

This is the summary of tasks and groups:

Group	Subgroup	Question	Approach	Go to section
Group 1 - Bryophytes diversity	Subgroup 3		GLM	
	Subgroup 4		GLM	
Group 2 - Bryophytes diversity	Subgroup 3		BRT	
	Subgroup 4		BRT	
Group 3 - Dendrocopos major	Subgroup 3		GLM	
	Subgroup 4		GLM	
Group 4 - Dendrocopos major	Subgroup 3		BRT	
	Subgroup 4		BRT	

2 Data

(Améztegui, Brotons, and Coll 2010)

Améztegui, Aitor, Lluís Brotons, and Lluís Coll. 2010. “Land-Use Changes as Major Drivers of Mountain Pine (*Pinus Uncinata* Ram.) Expansion in the Pyrenees.” *Global Ecology and Biogeography* 19 (5): 632–41. <https://doi.org/10.1111/j.1466-8238.2010.00550.x>.