

New and old World perspectives for forest ecology and management in a context of global change



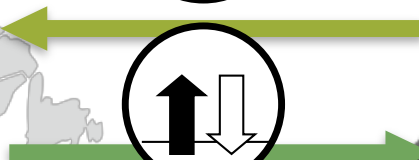
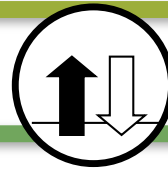
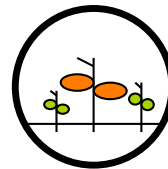
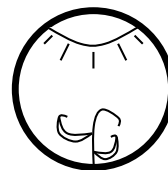
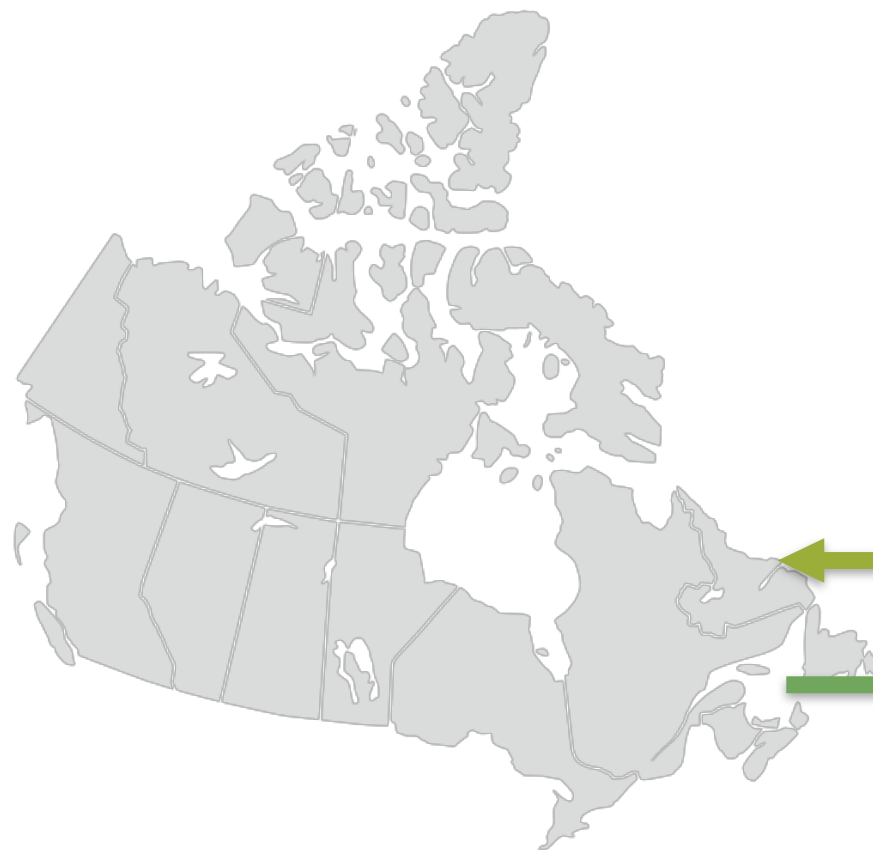
## Main tasks and research initiatives of the CREAM in NEWFORESTS

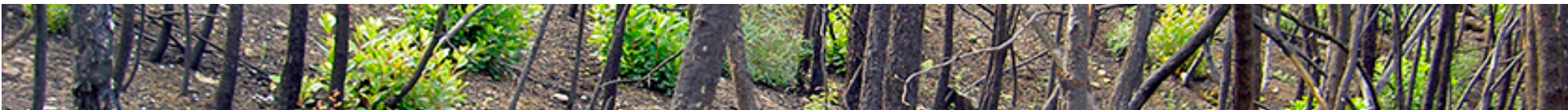
Kick-off meeting conference of the NEWFORESTS project  
MONTREAL 3-5 February 2014



# Introduction

The NEWFORESTS project





# Researchers

Some of the people you might like to know





# Project structure

## NEWFORESTS WP & Tasks

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### 1-Functional diversity and ecology

- 1.Developing diversity experiments in Catalonia
- 2.Ecosystem carbon pools and fluxes
- 3.Characterizing the variability in tree functional traits

### 2-Biodiversity dynamics

- 1.Landscape structure and biodiversity in forests
- 2.Baseline on the long-term taxonomic diversity
- 3.Effects of tree diversity on agroforest microarthropods
- 4.Emerging communities under different landscapes

### 3-Disturbance dynamics

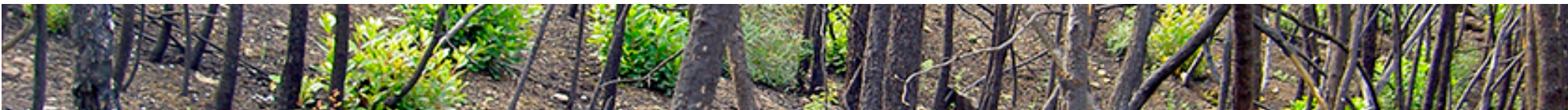
- 1.Impact of fires on biodiversity across forest systems
- 2.Reconstruction of past fire disturbance regimes
- 3.Climate-induced forest dieback

### 4-Forest complexity modelling

- 1.Modelling of forest spatial dynamics
- 2.Modelling landscape response to simultaneous drivers
- 3.Improving niche models using plant functional traits
- 4.Interaction between management, disturbance and resilience

### 5-Forest ecosystem management

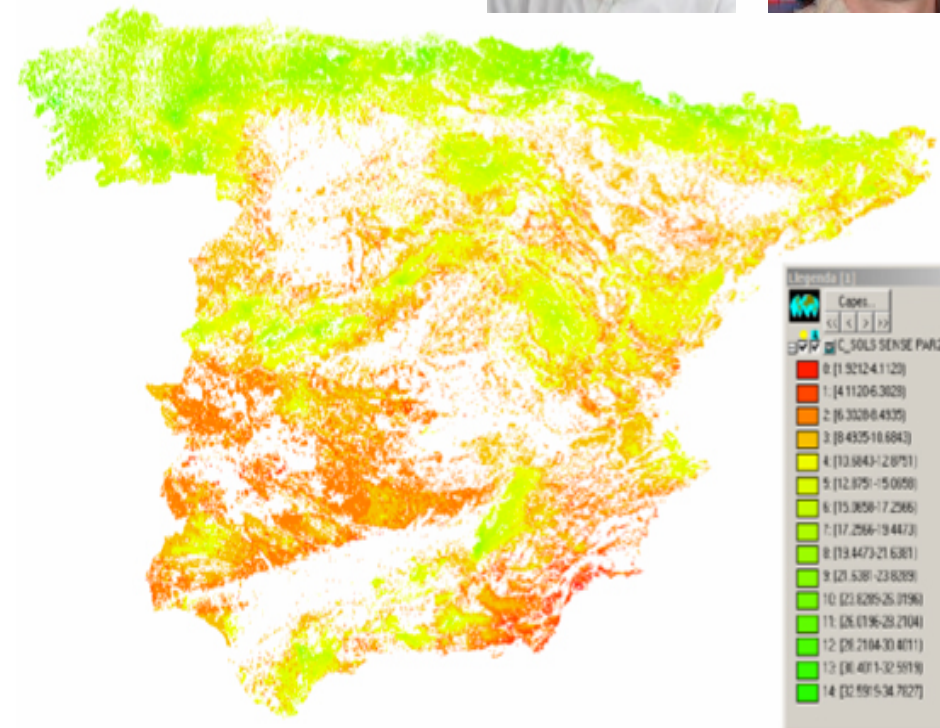
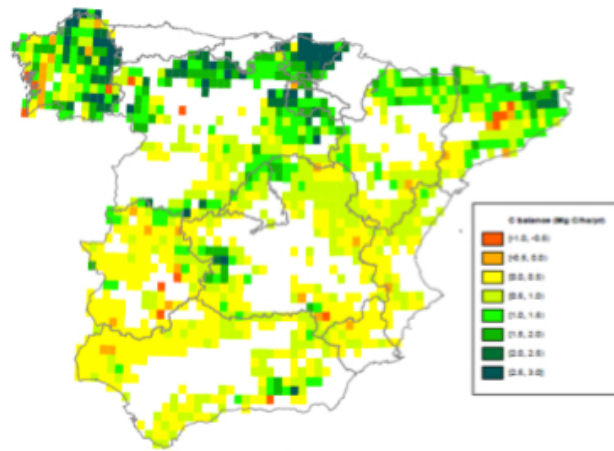
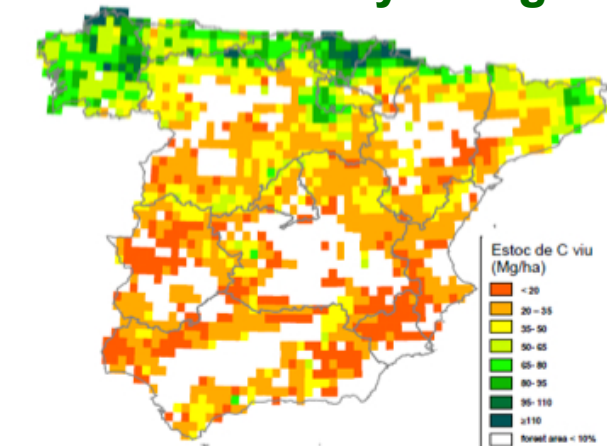
- 1.Application of landscape strategies at the Mediterranean
- 2.Reference indicators and cost-benefit assessments



# 1-Functional diversity and ecology

## 2.Ecosystem carbon pools and fluxes

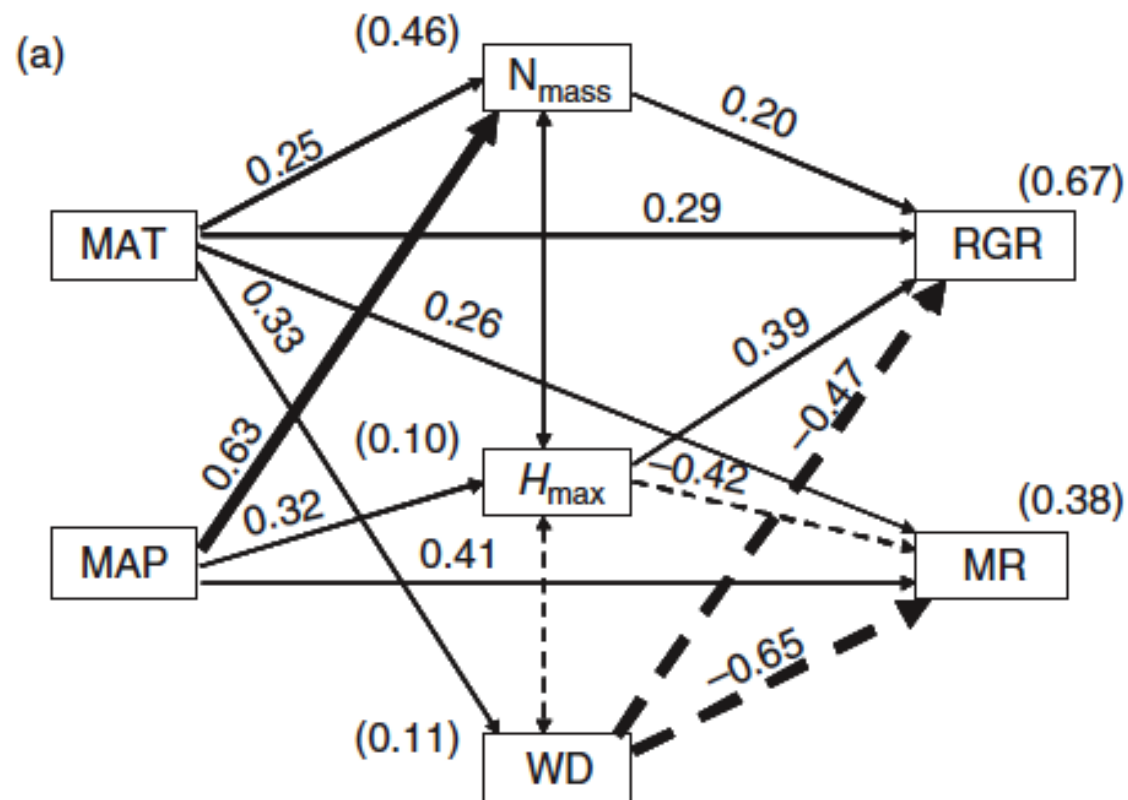
### Patterns of mortality and growth in Spanish forests

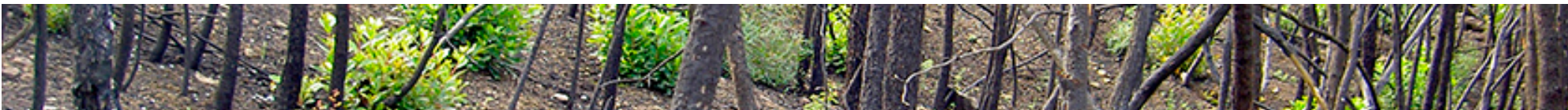


Vayreda et al. (2012) Global Change Biology  
Doblas et al. (2013) Biogeosciences

# 1-Functional diversity and ecology

## 3.Characterizing the variability in tree functional traits





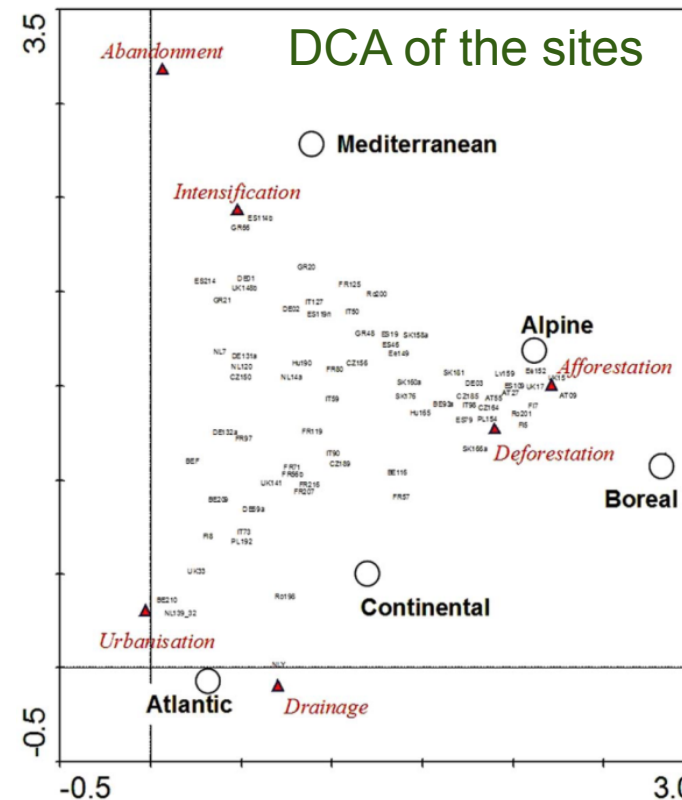
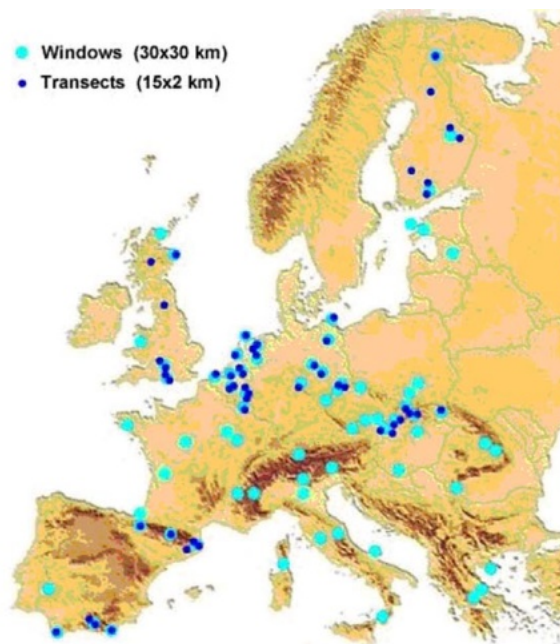
# 2-Biodiversity dynamics

## 1.Landscape structure and biodiversity in forests



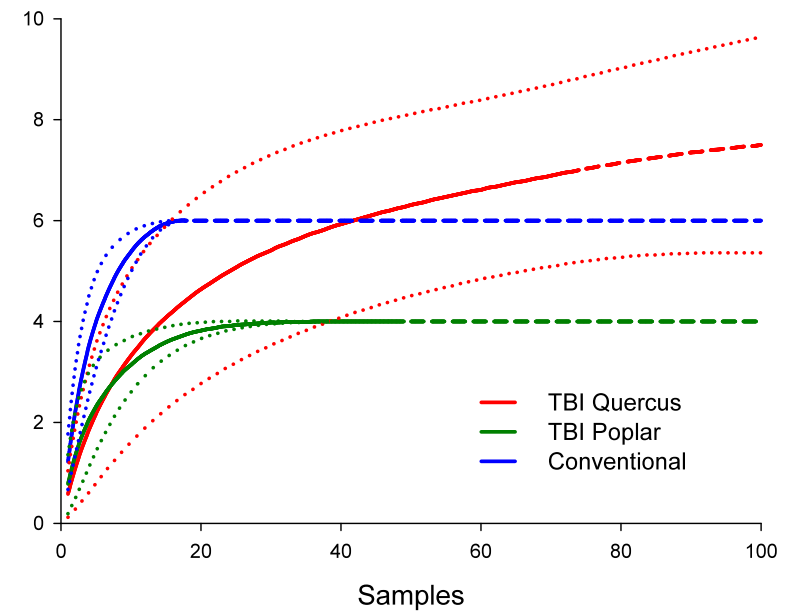
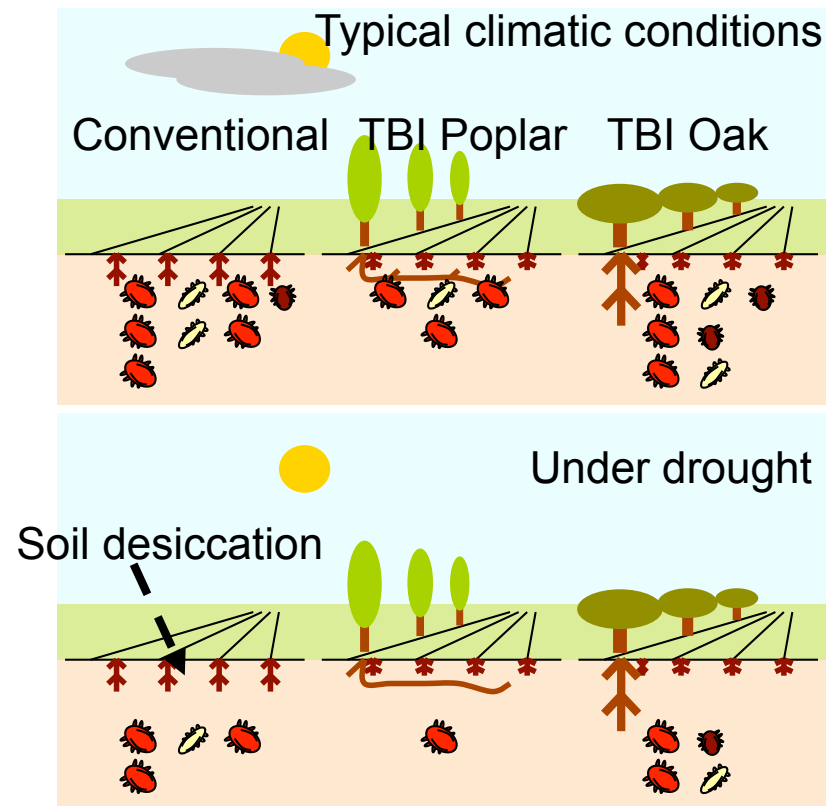
### Contrasting patterns of LUC pressures across biogeographic regions

#### Sites across Europe



# 2-Biodiversity dynamics

## 3.Effects of tree diversity on agroforest arthropods

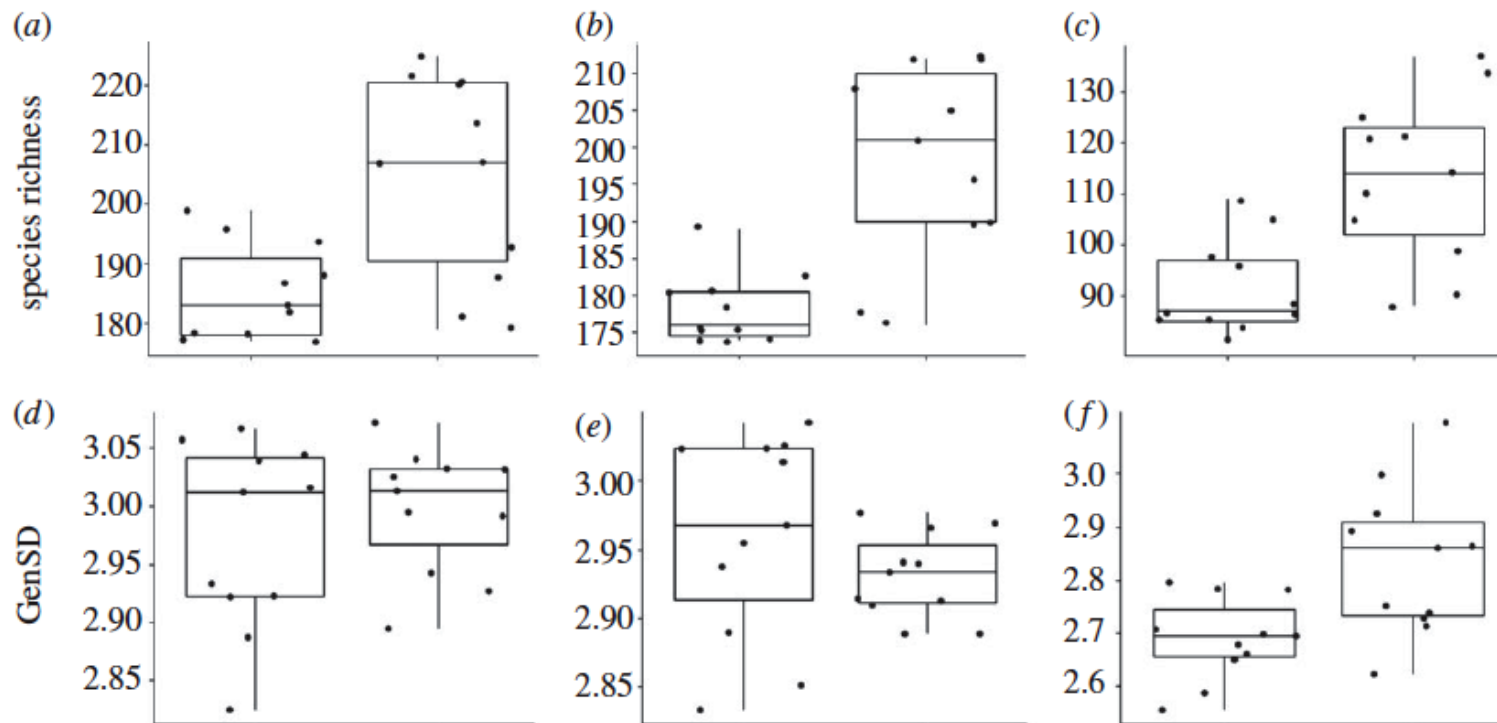






## 2-Biodiversity dynamics

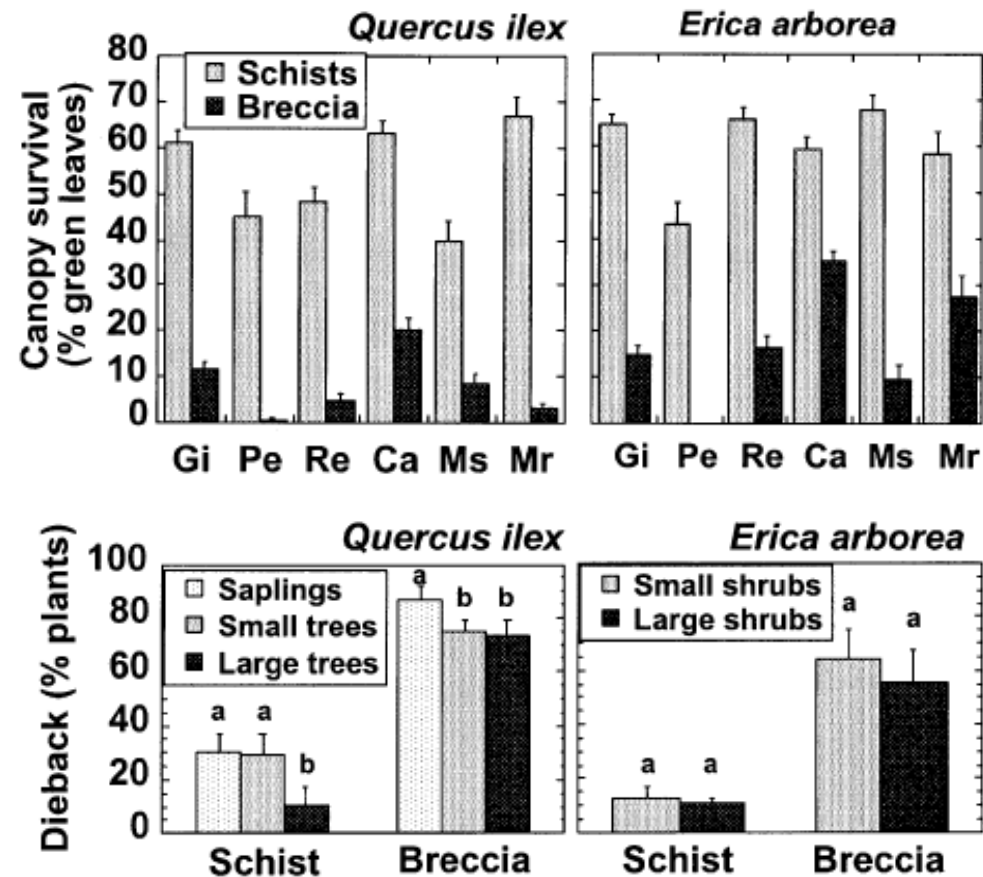
### 4. Emerging communities under different landscapes





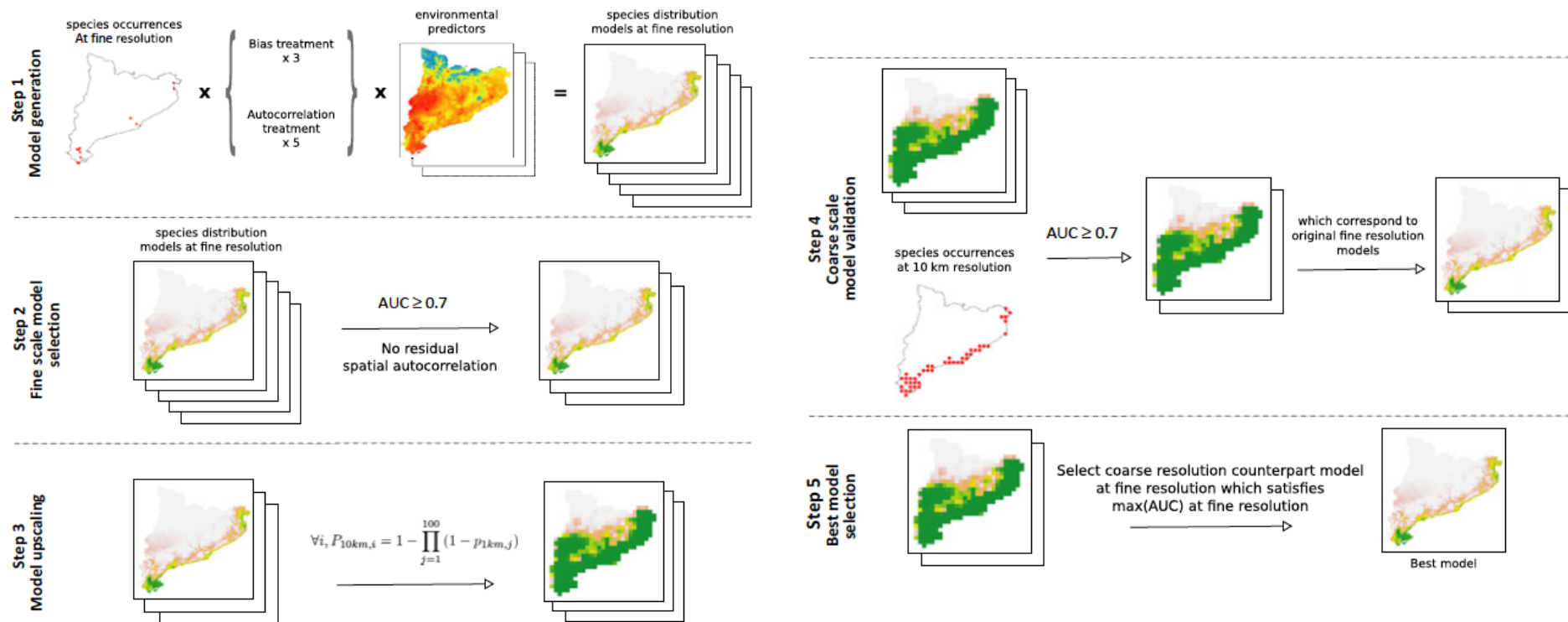
# 3-Disturbance dynamics

## 3. Climate-induced forest dieback



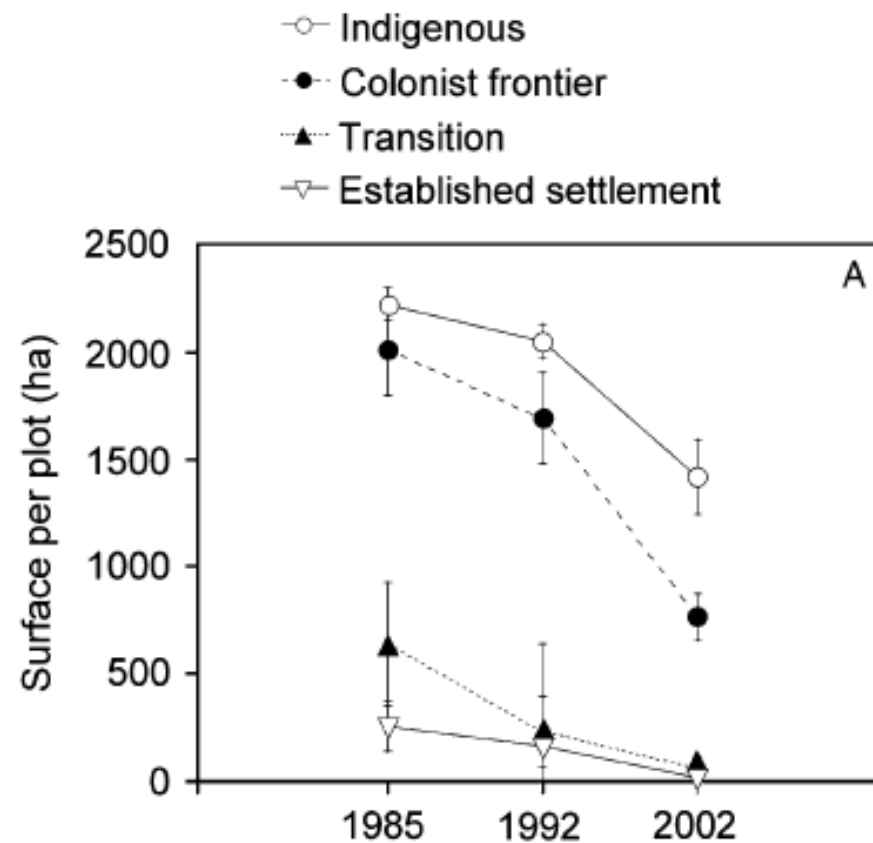
# 4-Forest complexity modelling

## 1. Spatial analysis of ecological data



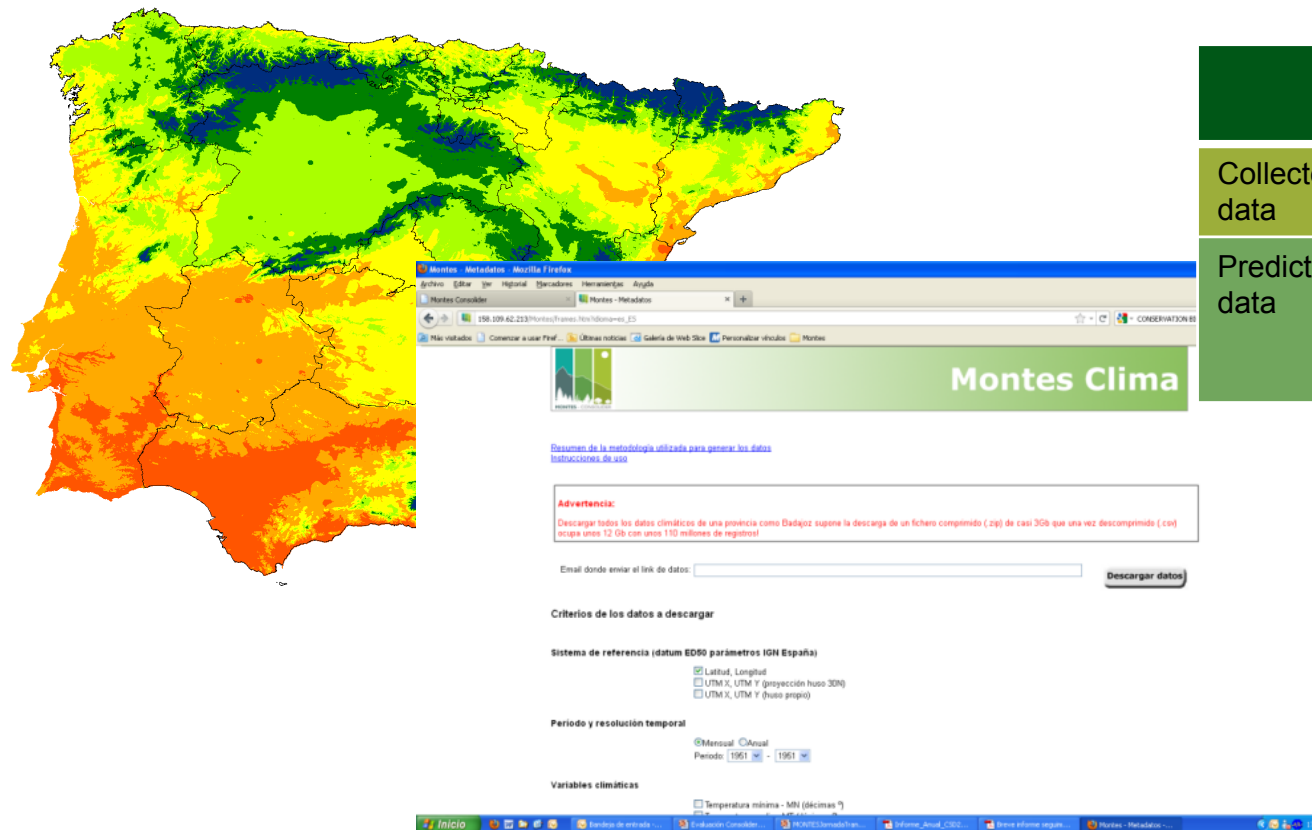
# 4-Forest complexity modelling

## 4.Management, disturbance and resilience interaction



# Other things to share

## Climatic data of the Iberian Peninsula 1x1Km



	PERIOD	MODEL- ESCENARIO
Collected data	1951-2010	
Predicted data	2011-2100	CGCM2 - A2 CGCM2 - B2 ECHAM4 - A2 ECHAM4 - B2

### VARIABLES (units)

Minimum temperature - MN  
(*tenth* °),

Maximun temperature - MX  
(*tenth* °),

Mean temperature– MT (*tenth* °),

Precipitation – PL (*tenth* mm),

Potential solar radiation– RAD  
(10 kj)/(m<sup>2</sup>\*day\*micrometre)

# Other things to share

## Online meta-database

**Proyecto Montes**

[Cerrar sesión del usuario: creaf](#)

**METADATOS**

[MIS METADATOS](#)

Esta página permite el acceso restringido (con contraseña e identificador) a los participantes del proyecto MONTES para que introduzcan información sobre sus bases de datos en un servidor común (e.g. zonas de estudio, variables, tipos de ecosistema bajo estudio, periodicidad de los datos, etc). Esta meta-base de datos agrupa una de las informaciones más completas en el ámbito estatal sobre experimentos y variables disponibles relacionados con el cambio global en los montes ibéricos.

[CONSULTAR BASES DE METADATOS](#)

Mediante acceso restringido, los usuarios del proyecto MONTES podrán consultar la base de datos puesta en común con la información de experimentos realizados en el ámbito y temáticas del proyecto MONTES. Este servicio de consulta permite identificar qué equipos están trabajando en qué regiones de la Península para potenciar la cooperación científica entre universidades y el análisis de tendencias en diversos gradientes (e.g. latitudinales, altitudinales, edáficos, etc).

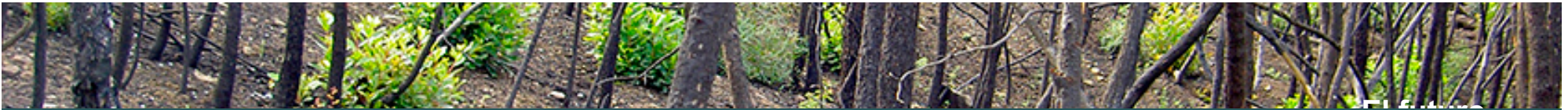
[DATOS COMUNES: METADATOS](#)

Este espacio ofrece información de interés general, de acceso libre, con el objetivo de establecer cierta homogeneidad entre las bases de datos comunes que utilizan los diferentes participantes de MONTES. Ejemplos de bases de datos de interés general serían: climatología, suelos, incendios, divisiones administrativas o localizaciones de zonas de estudio.

**DATOS**

[DATOS CLIMÁTICOS](#)

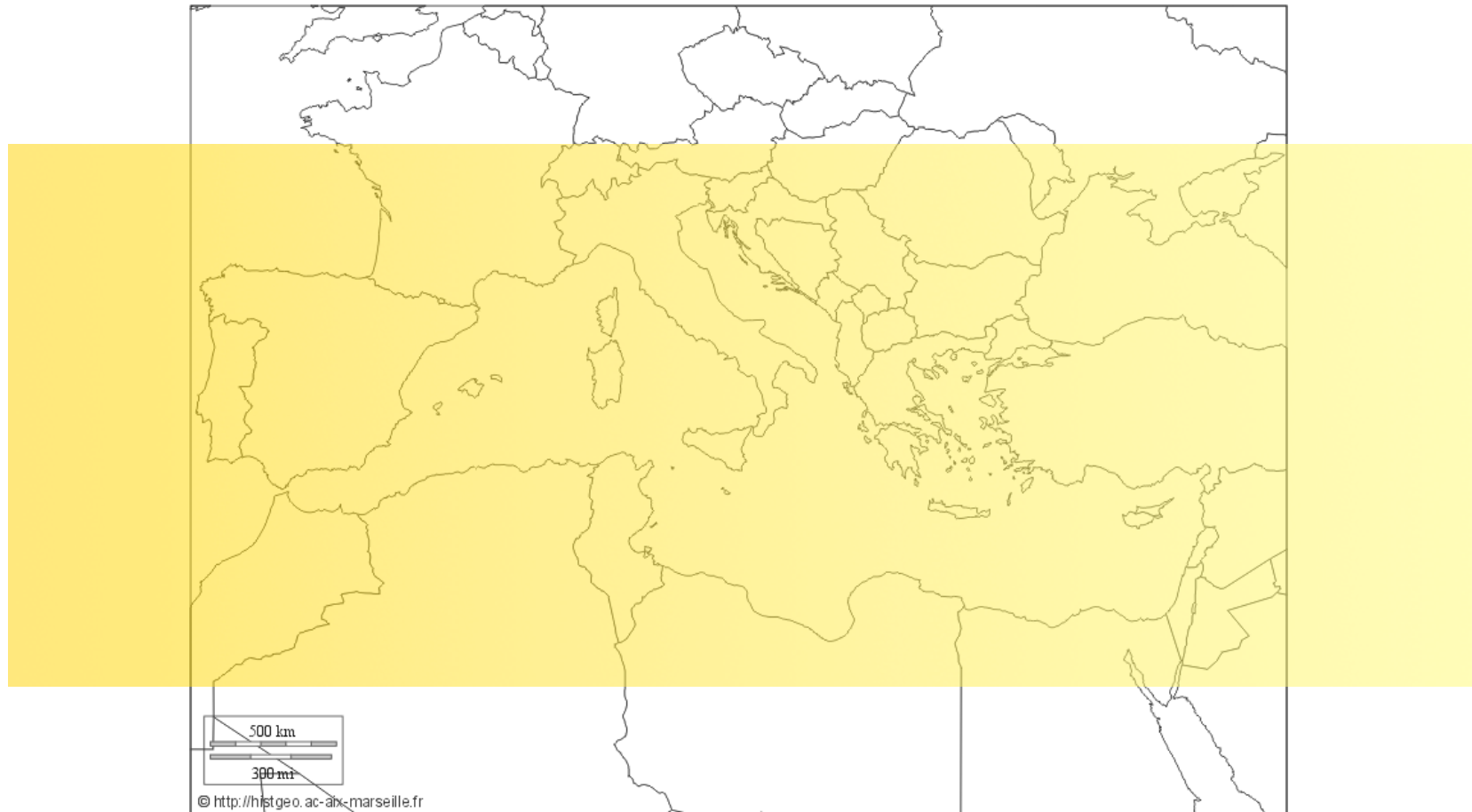
Acceso a la página de selección y petición de los datos climáticos generados para el proyecto MONTES por M. Ninyerola y M. Batalla a partir de de la información cedida por la Agencia Estatal de Meteorología. Ministerio de Medio Ambiente, y Medio Rural y Marino.



# Other projects

Collaboration all over the Mediterranean Region

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**Merci beaucoup!**

**[www.creaf.cat](http://www.creaf.cat)**

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