

Innovative forest management strategies for a resilient bioeconomy under climate change and disturbances

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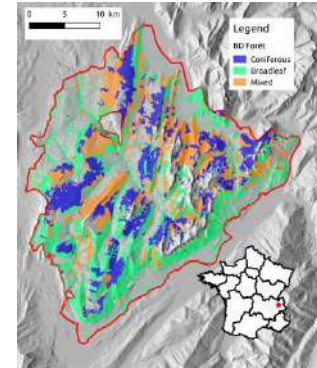
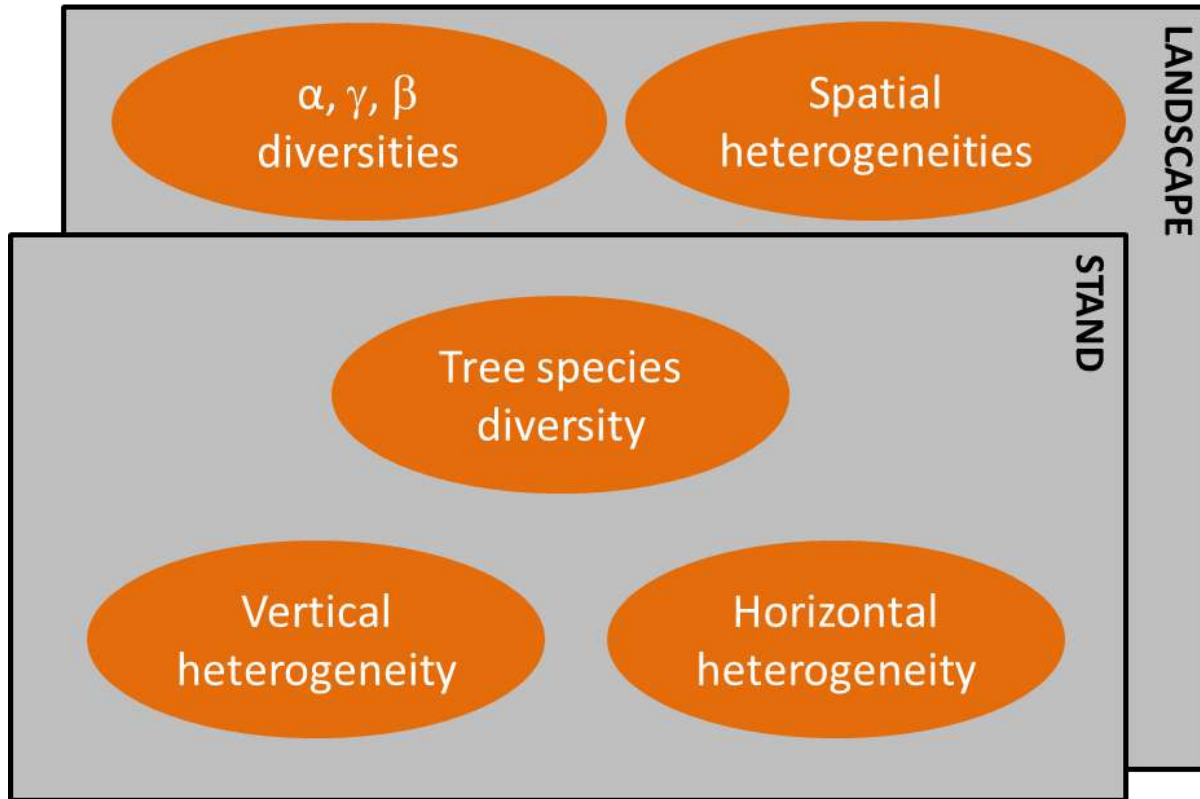
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Context

- 🍃 **Climate change** will affect **wood production** and other **ecosystem services (ES)**.
- 🍃 **Disturbances** could intensify in the future and interact with climate change in modulating ES.
- 🍃 **Forest resilience** can play a major role in limiting degradation of the forest and associated ES.

Structural complexity



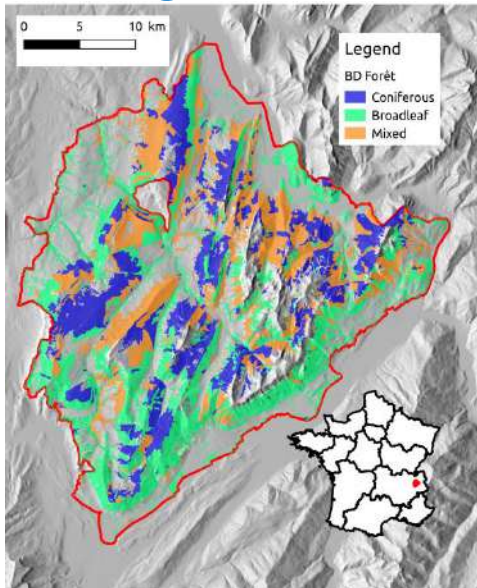
Is fostering structural complexity a relevant strategy to sustain ES provisioning and on what scale?

Objectives

- ✦ **Synthesize and improve knowledge** on resistance to disturbances and recovery dynamics.
- ✦ **Update a disturbance database** and produce disturbance scenarios over Europe.
- ✦ **Analyse the impacts** of disturbances, management and climate change scenarios on ES at different scales.
- ✦ **Assess the effect of structural complexity** on ES and the value of complexity-based management strategies.
- ✦ **Provide recommendations for enhancing forest resilience** through adaptive management strategies.

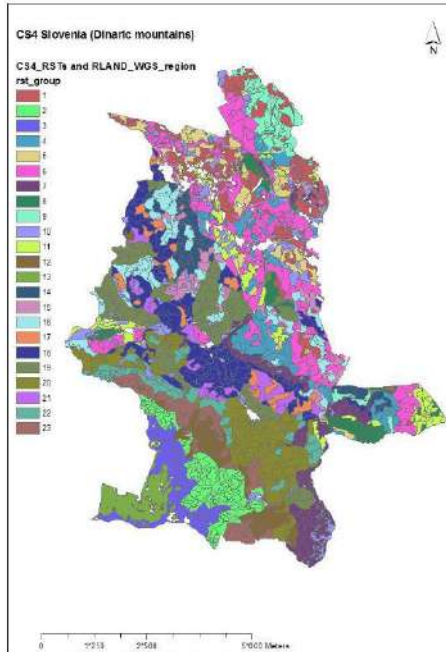
3 landscapes

Bauges, France



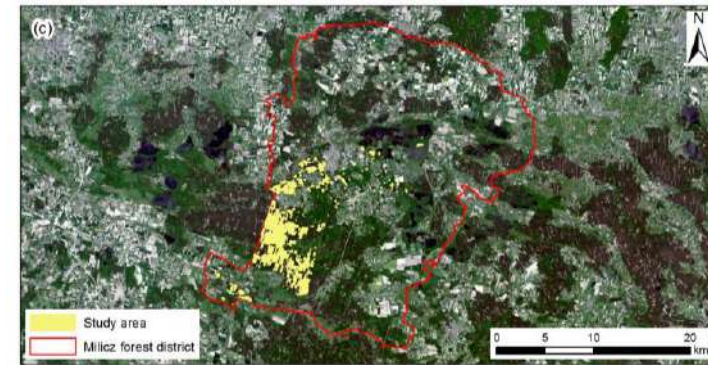
51,136 ha

Snežnik, Slovenia



5,051 ha

Milicz, Poland



24,673 ha

Disturbances

windstorms, bark beetle damages, severe droughts, ice storms, snow avalanches...

Ecosystem services

wood production, carbon storage, protection against snow avalanches and rockfalls, biodiversity conservation

4 countries



GERMANY

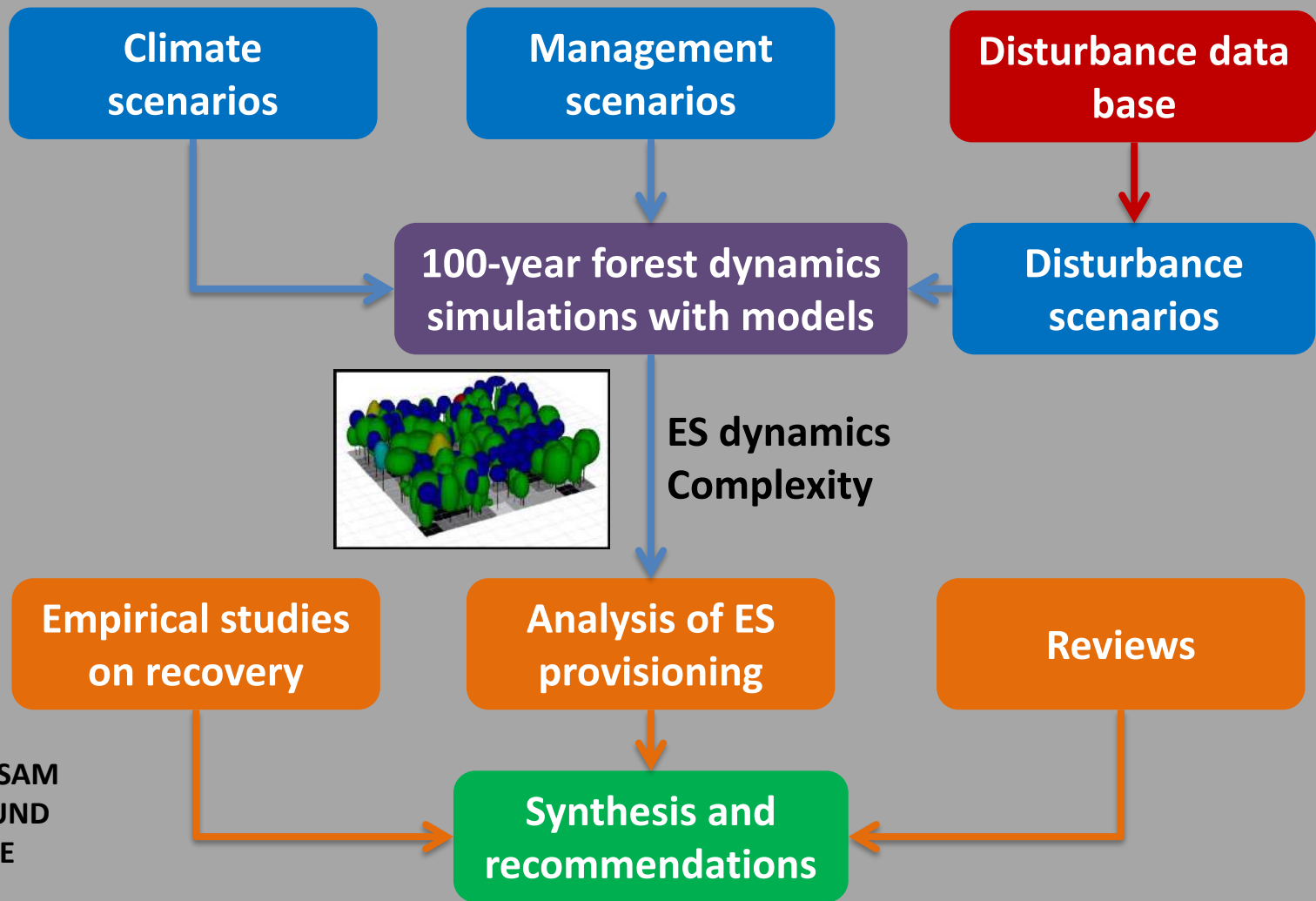
POLAND

FRANCE

SLOVENIA

Temperate forest ecosystems dominated by fir, spruce, beech, Scots pine

stand, landscape, country



I-MAESTRO GROUP

