



CLImate-Smart Forestry in MOuntain Regions



UNIVERSITÀ  
DEGLI STUDI  
DEL MOLISE



# Sustainable Forest Management and *smart forests*: COST Action CLIMO

Giovanni Santopuoli



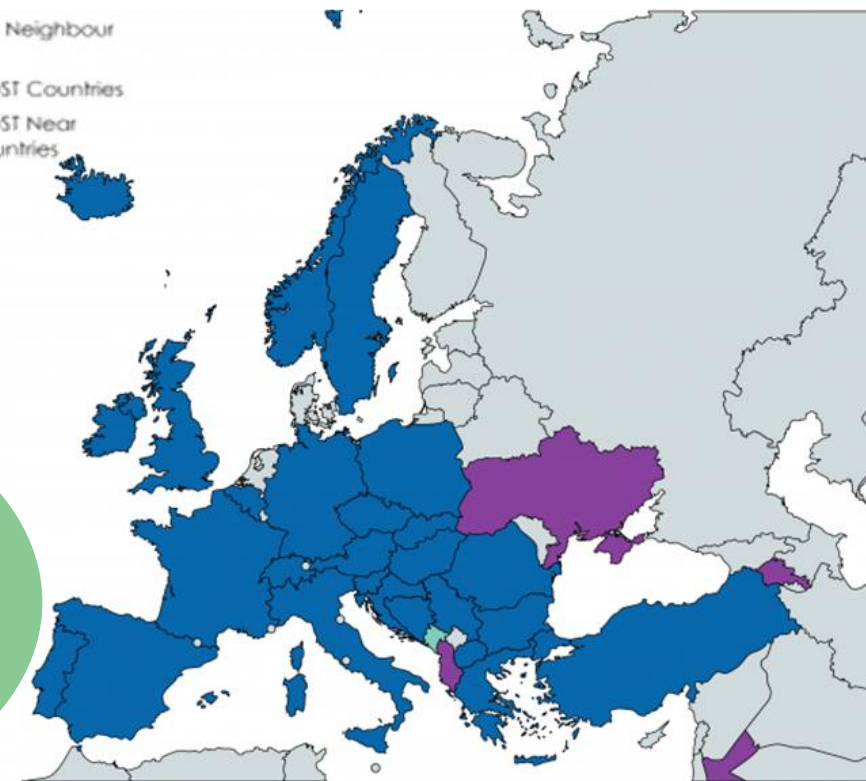
**FutureFor  
Coppices**

*"Gestione sostenibile dei boschi cedui: indicazioni  
per il futuro dall'eredità di prove sperimentali"*  
Arezzo, 22 Marzo, 2019



COST Action CA15226 - CLIMO

- EOI COST Near Neighbour Countries
- Participant COST Countries
- Participant COST Near Neighbour Countries



Climate-Smart innovative schemes of Payment for Environmental Services (PES)

Approaches and Definitions of Climate Smart Forestry (CSF)

European Smart FOrests NETwork

Development of a future cybernetic web of experimental structures

27 partners

Oct. 2016  
Oct. 2020

<http://climo.unimol.it/>





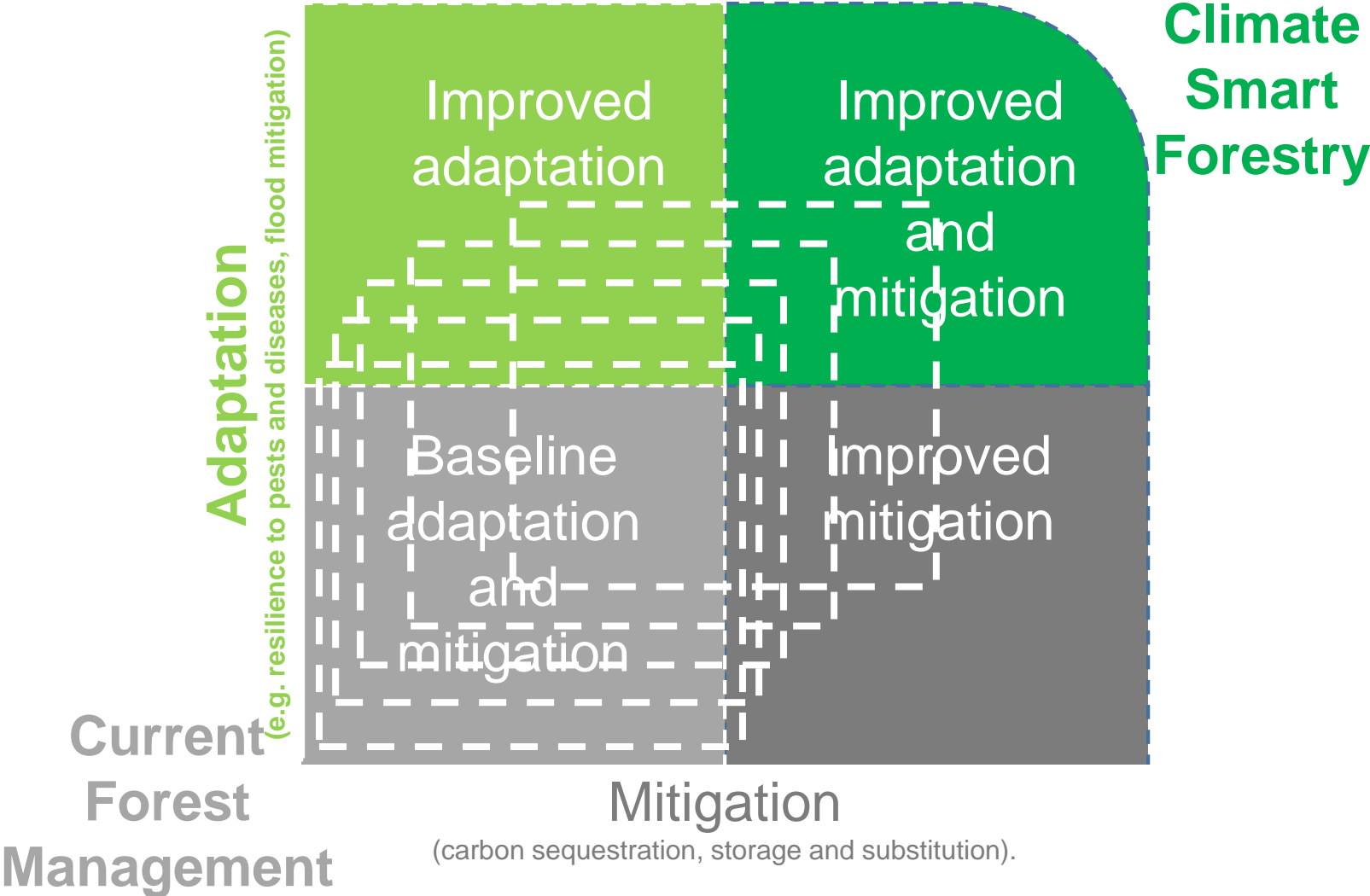
*High forest, Inverness (Scotland) 2018*



*Coppice forest, Italy 2010*



# Climate Smart Forestry



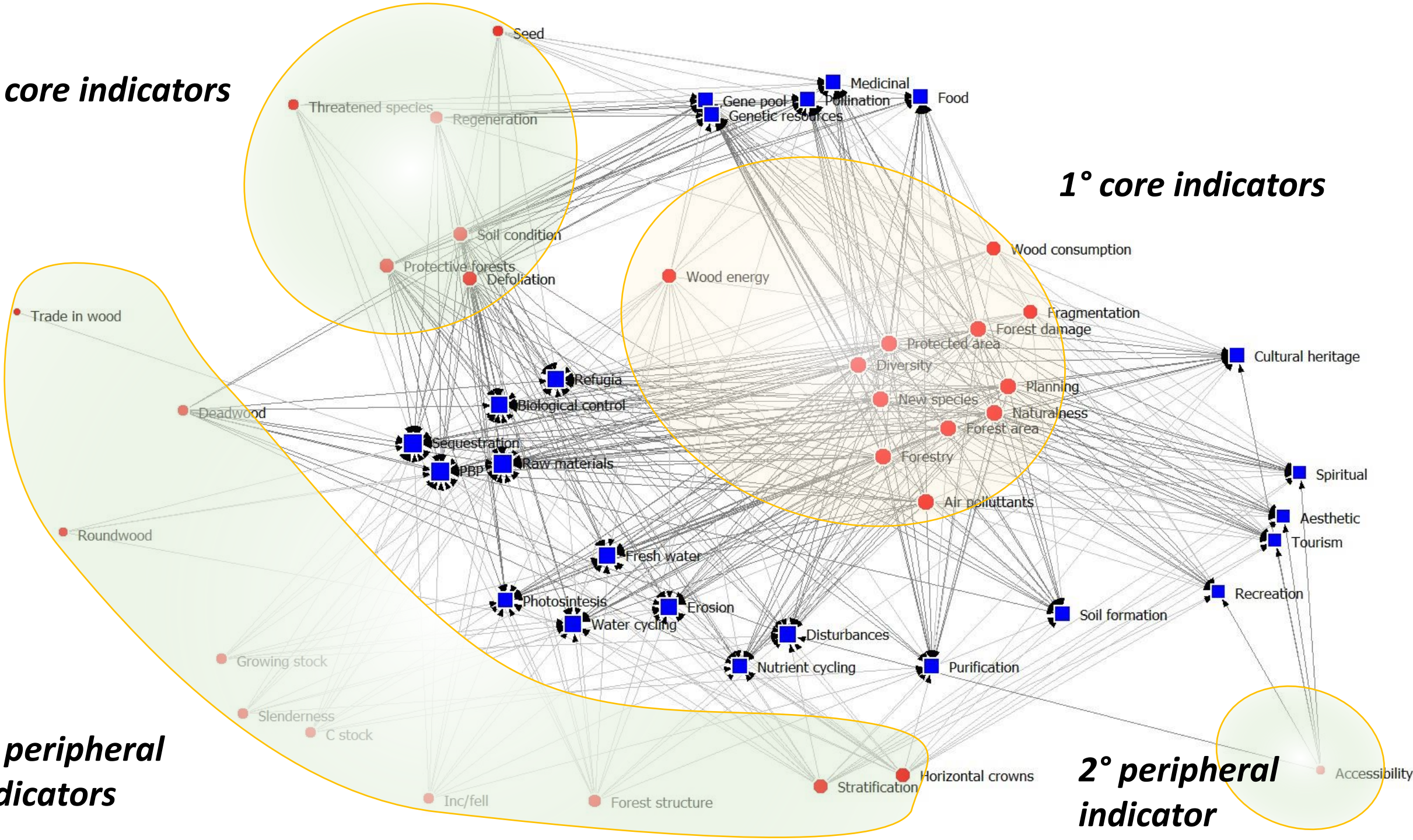


*2° core indicators*

*1° core indicators*

*1° peripheral indicators*

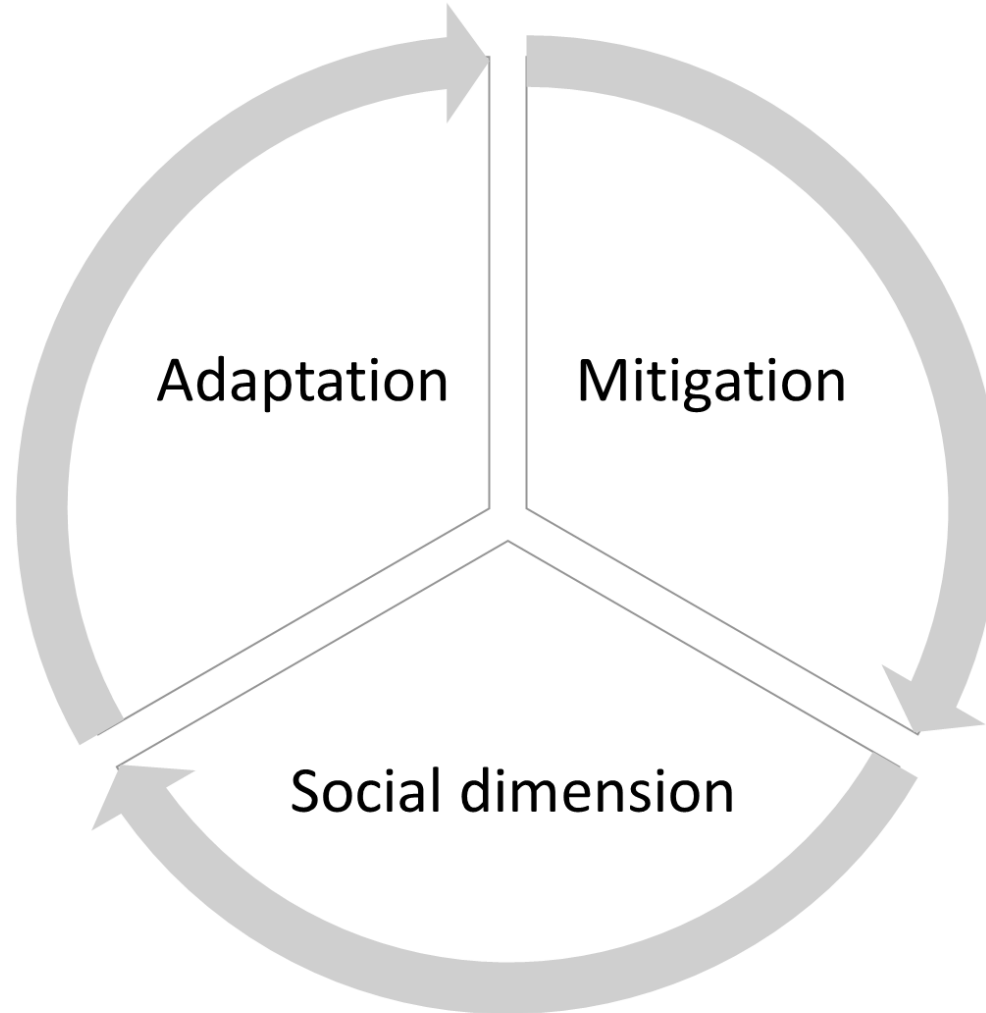
*2° peripheral indicator*





# Definition of CSF

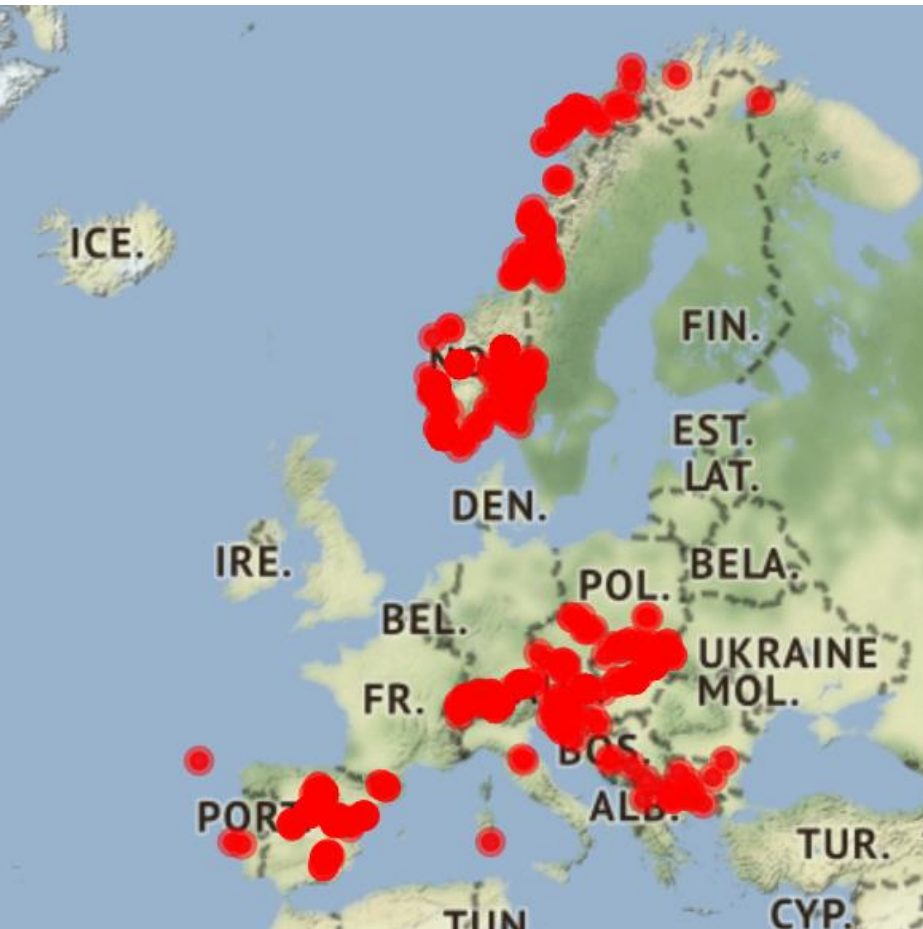
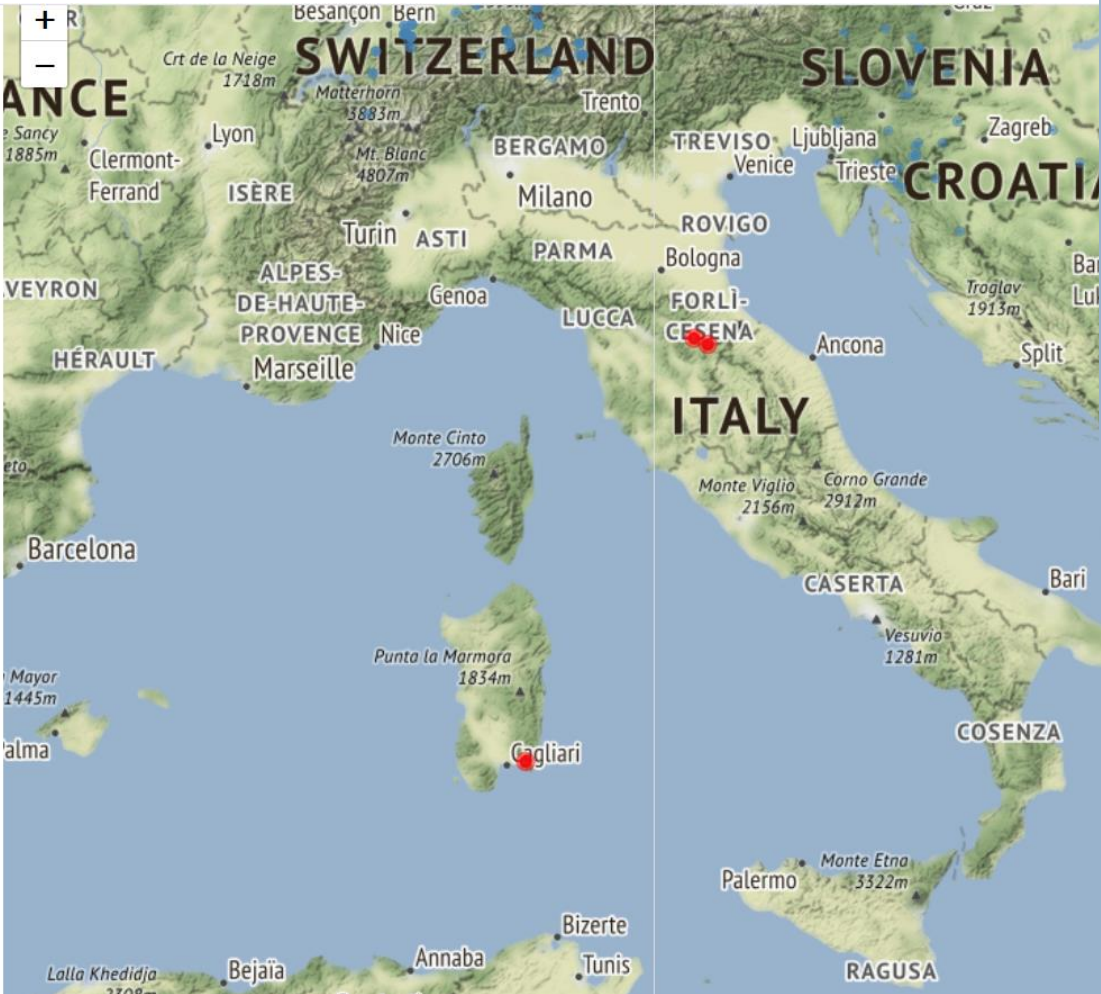
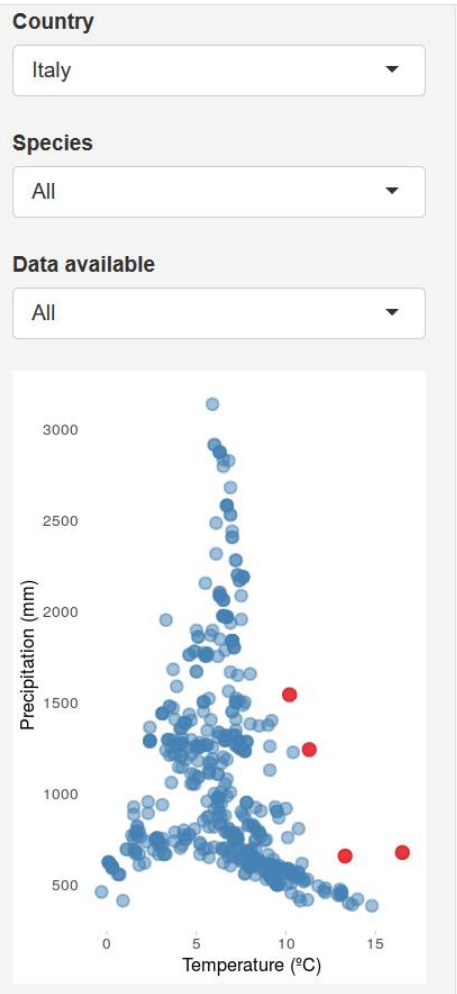
*Climate-smart  
management are  
potential of forest  
change. The  
functions and  
ecosystem goods  
impact of climate  
being are*



The ***social dimension*** of forestry holds many aspects, from the involvement of stakeholders from local communities, and their conflicts over land use or for the access to skills and technology, to global forest governance challenges. Climate change may jeopardize forest ecosystem functioning and brings social and economic consequences for people, which may modify priorities of ecosystem services at various scales. Assessment for ecosystem services could be a tool making this process more efficient with respect to indicators relevant for governance regime and actors involved.

*Euan Bowditch; Giovanni Santopuoli; Franz Binder; Miren del Rio; Nicola La Porta; Tatiana Kluvankova; Jerzy Lesinski; Renzo Motta; Maciej Pach; Pietro Panzacchi; Hans Pretzsch; Christian Temperli; Giustino Tonon; Violeta Velikova; Melanie Smith; Andrew Weatherall; Roberto Tognetti*

# European Smart Forest Network (ESFONET)



*Testing Indicators in the field*

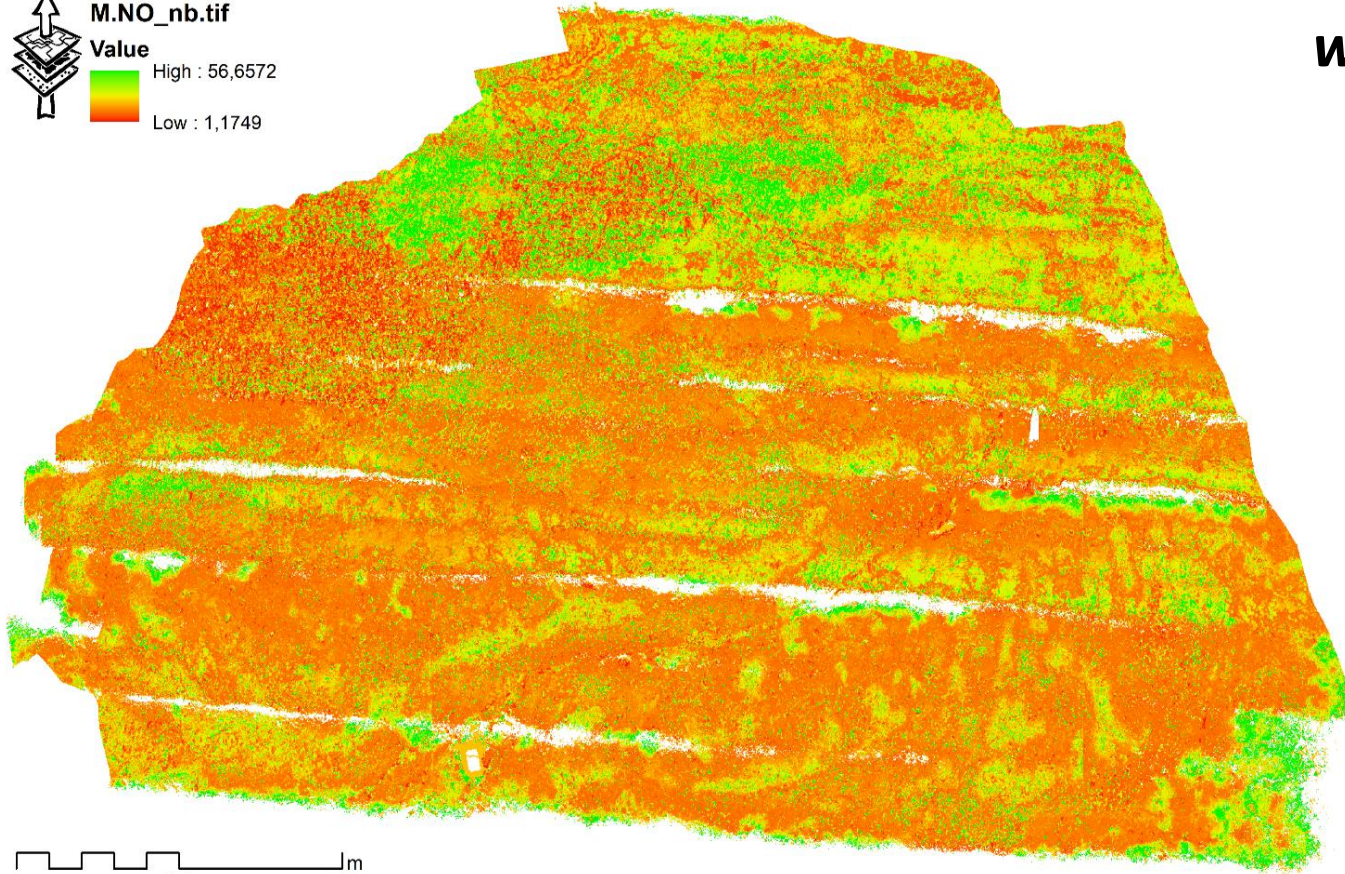
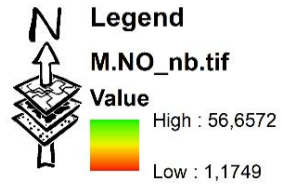
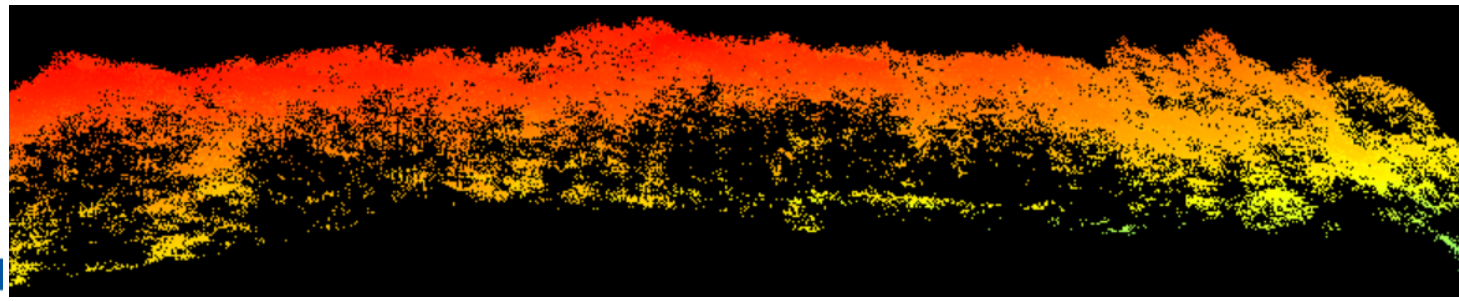
*Short-Term Scientific Missions*

[https://climoproject.shinyapps.io/CLIMO\\_dataset/](https://climoproject.shinyapps.io/CLIMO_dataset/)



# TREMS

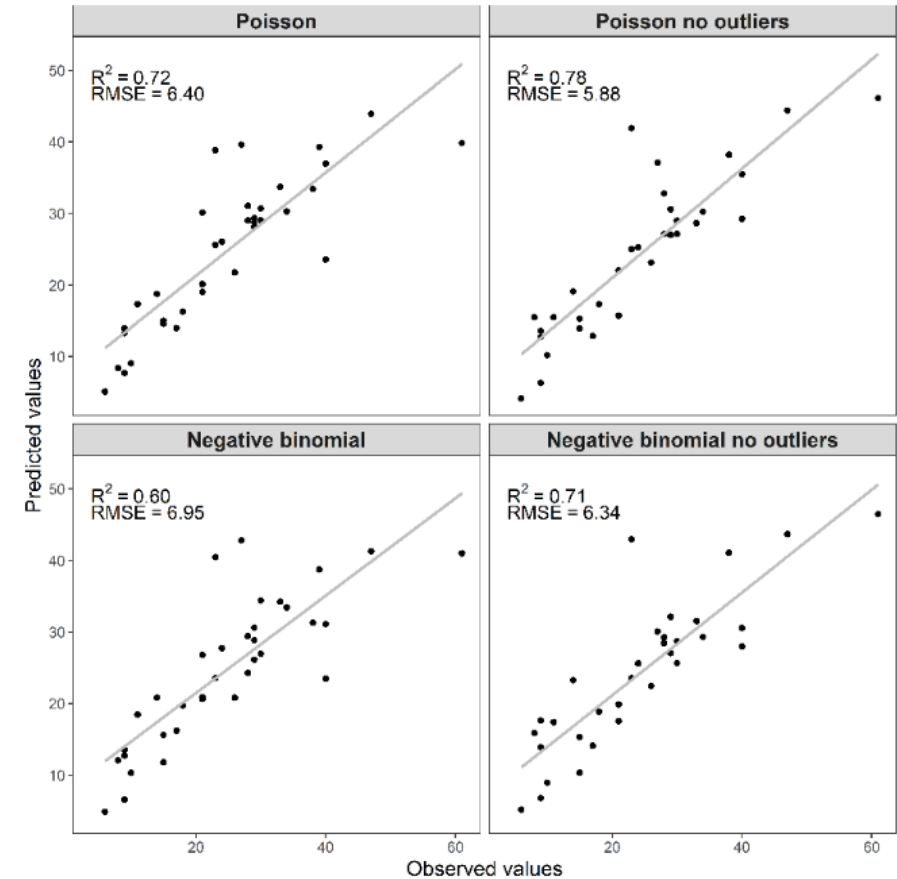
*Remote sensing to support  
SFM and smart forestry*



0 250 500 m



*Integrate monitoring of forest biodiversity  
with management practices*





A photograph of a forest scene. In the foreground, there are several bushes with dry, brown leaves. Behind them, a dense stand of tall, thin evergreen trees, likely spruce or fir, rises vertically. The sky is visible through the canopy, appearing overcast. The text "THANK YOU!!!" is superimposed in the center of the image.

**THANK YOU!!!**