

# Phenofit calibration report

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This document provides detailed information about a specific calibration run, including ABC algorithm performance and model outputs.

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## 1. Insights on the calibration process

Input data:

- Species : *F. sylvatica*
- 2000 calibration points (50/50 presence/absence)

Parameter tuning and calibration performance:

- $\lambda = 20$ ,  $\mu = 10$ ,  $\sigma = 2$
- 20 parallel objective function evaluations
- 60 CPUs, 80Go of memory
- Runtime = 23.81 hours
- AUC on calibration points = 0.863
- Discrimination metric: AUC on all presence/absence points = 0.871
- Reliability metric: Boyce index on all presence points = 0.987, 0.934, 0.934 (*Spearman*, *Pearson*, *Kendall*)

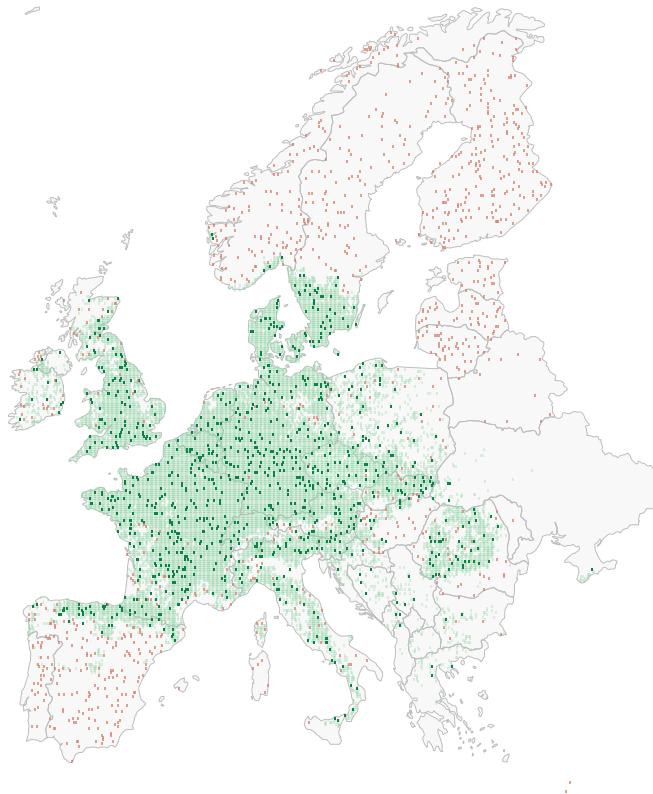


Figure 1: Calibration points: presence in red and absence in orange. Light green is species distribution area.

## 2. Simulation at European scale

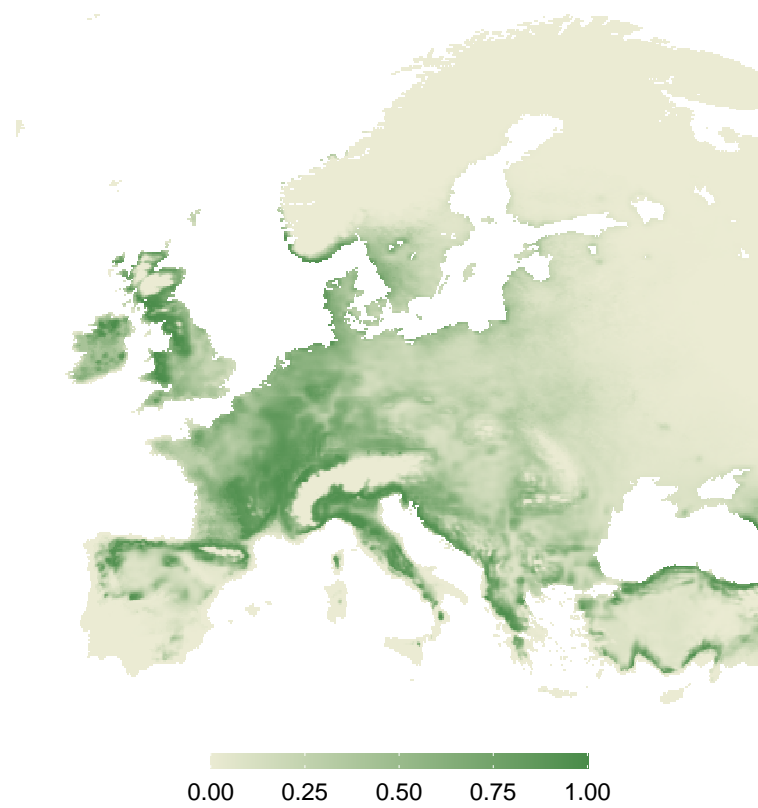


Figure 2: *Fitness map with calibrated parameter set*

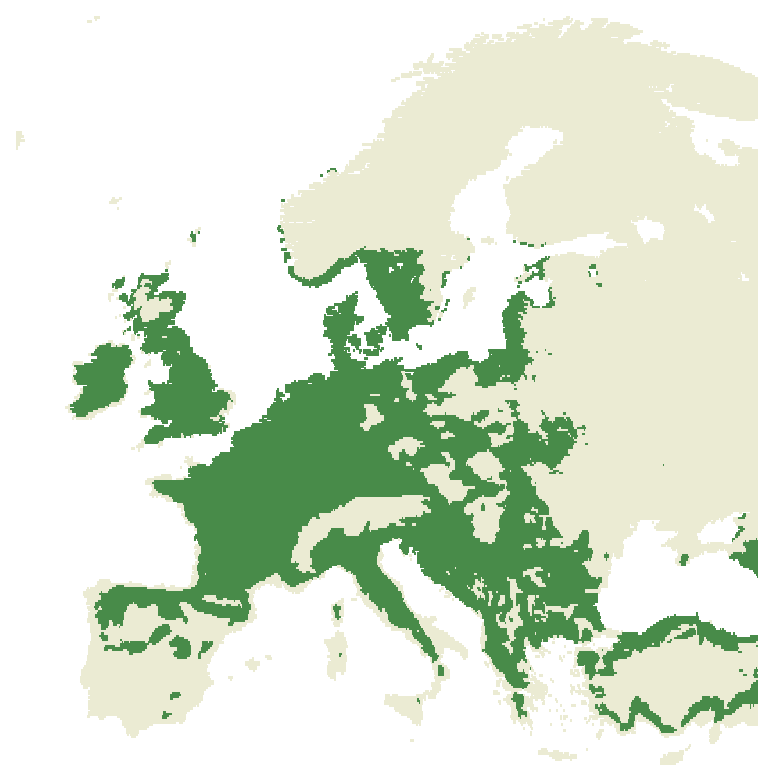


Figure 3: *Species presence map with calibrated parameter set. AUC threshold maximizing Youden index = 0.202.*