

Phenofit calibration comparison

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This document provides some insights to compare different CMA-ES calibrations with different presence/absence subsets (*F. sylvatica* with 1000 random presence points and 1000 random absence points).

1. Species parameters

1.1. Leaf unfolding model

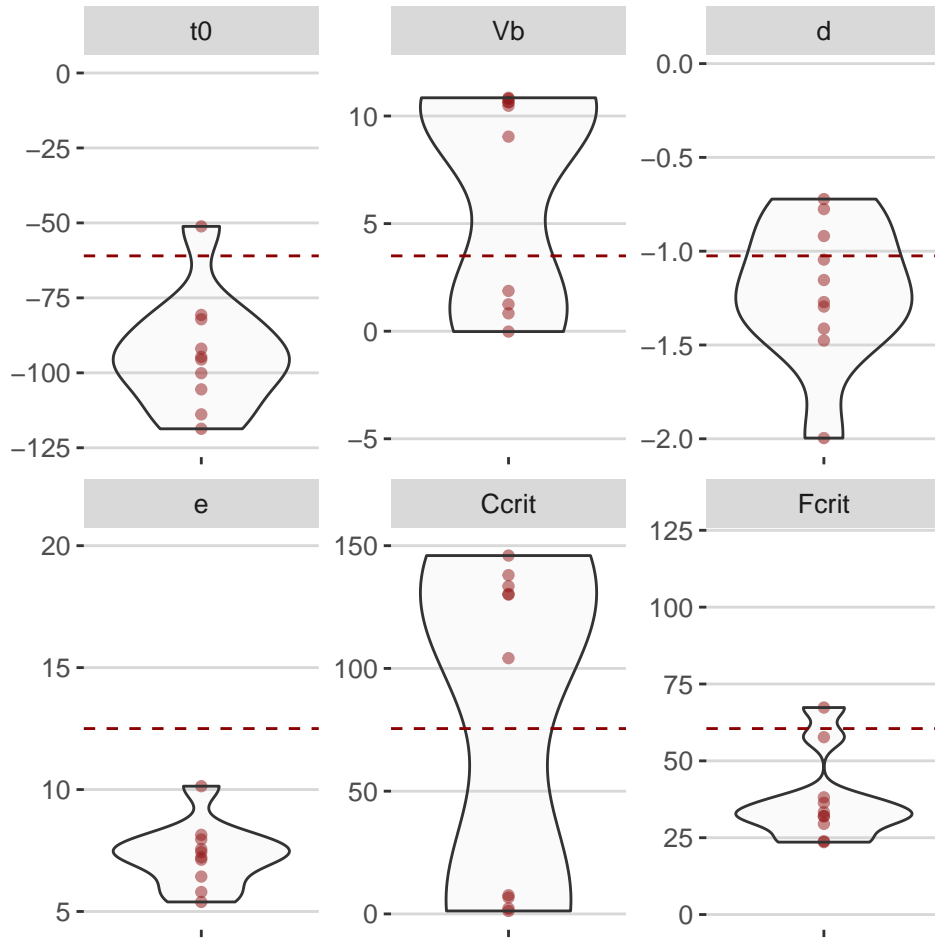


Figure 1: Leaf unfolding model parameter values. Y-axis limits are lower and upper bounds used during calibration. Dashed line is initial parameter value.

1.2. Flowering model

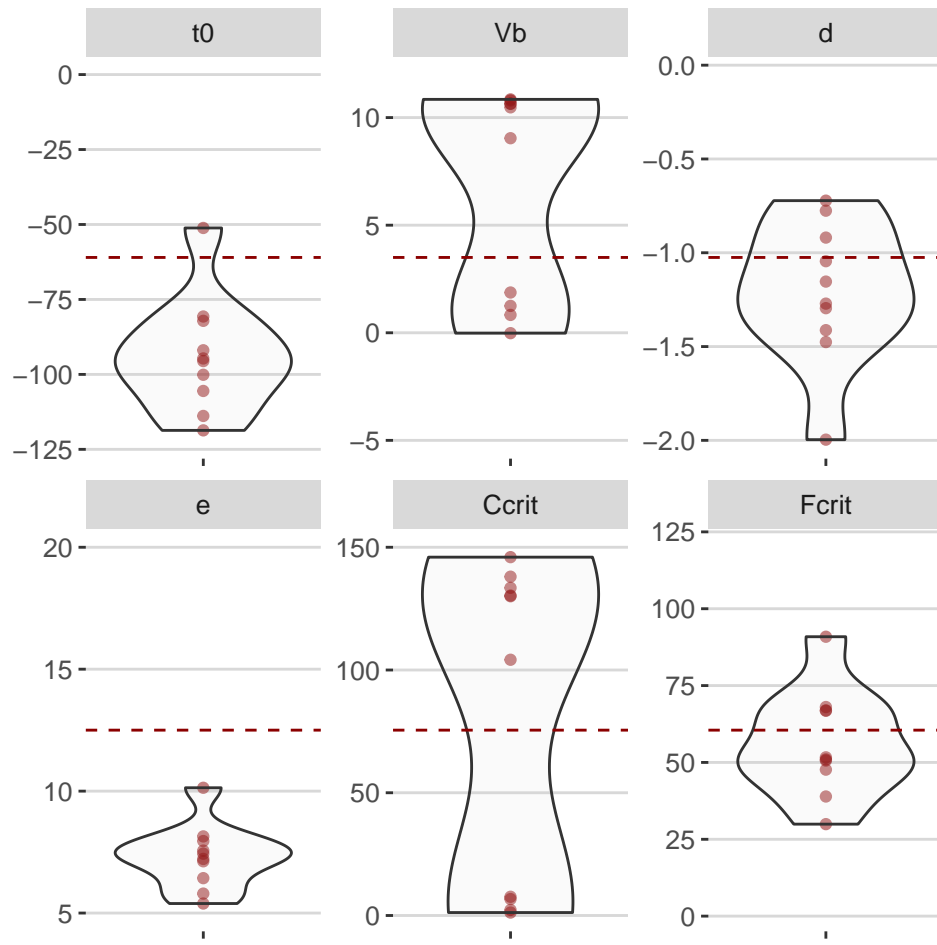


Figure 2: Flowering model parameter values. Y-axis limits are lower and upper bounds used during calibration. Dashed line is initial parameter value.

1.3. Fruit maturation model

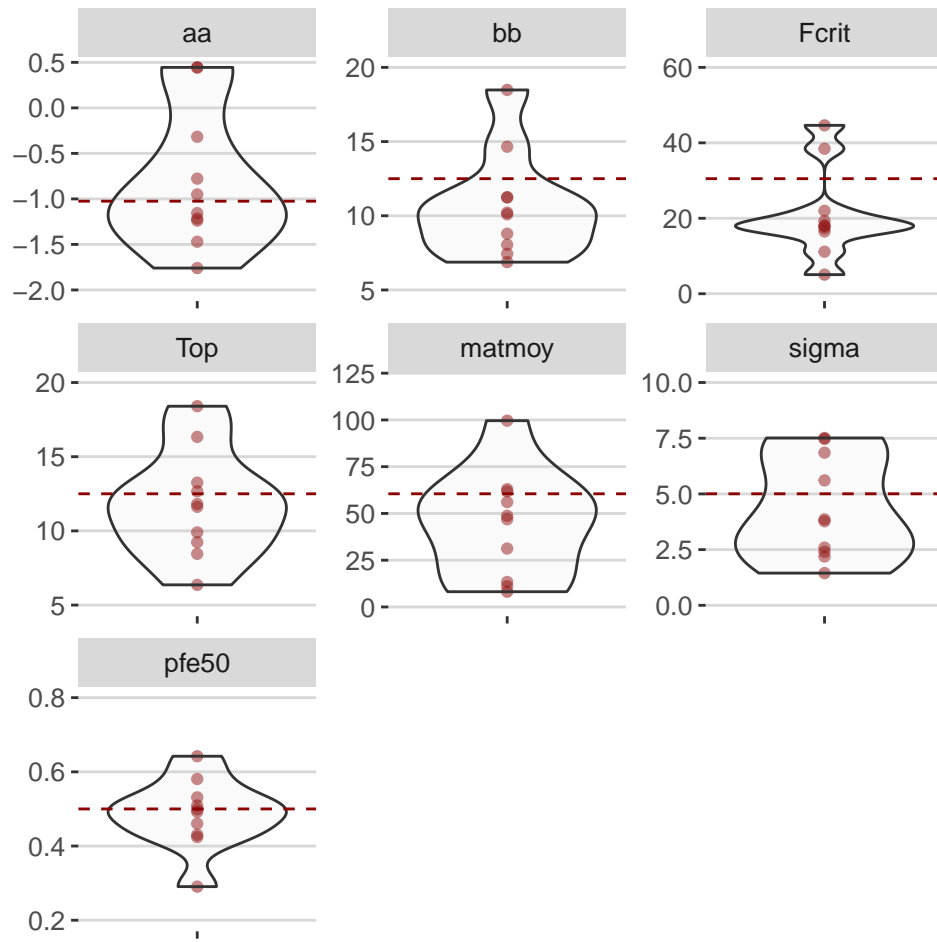


Figure 3: Fruit maturation model parameter values. Y-axis limits are lower and upper bounds used during calibration. Dashed line is initial parameter value.

1.4. Leaf senescence model

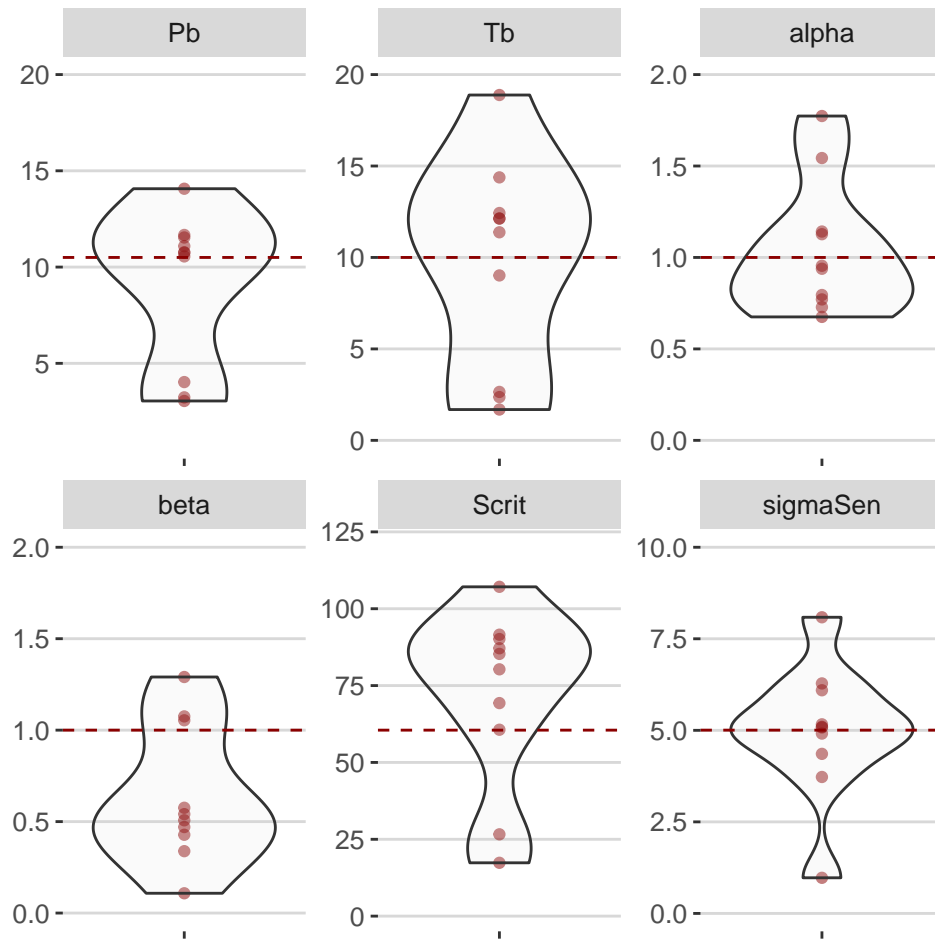


Figure 4: Leaf senescence model parameter values. Y-axis limits are lower and upper bounds used during calibration. Dashed line is initial parameter value.

1.5. Frost damage model

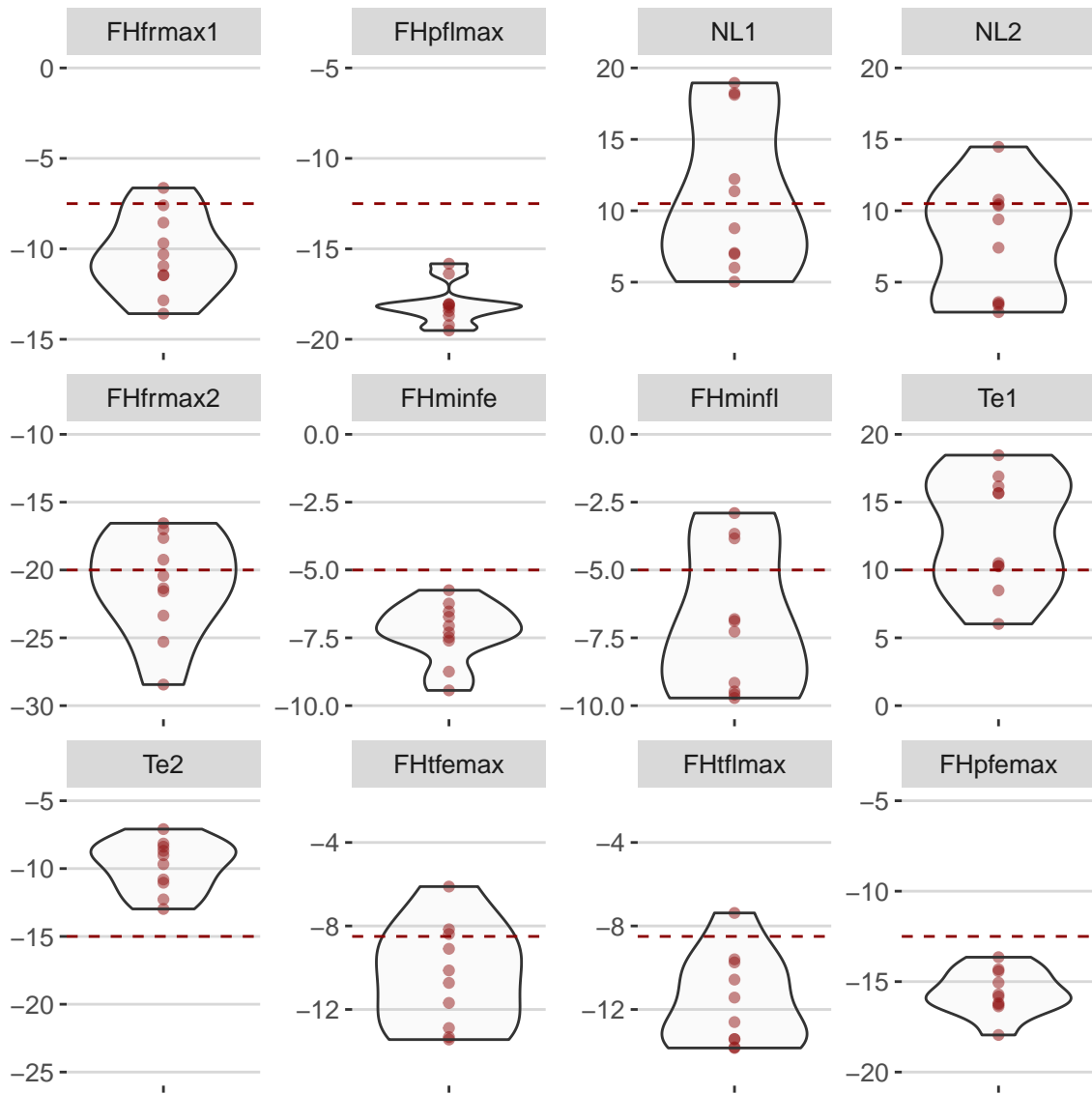


Figure 5: Frost damage model parameter values. Y-axis limits are lower and upper bounds used during calibration. Dashed line is initial parameter value.

1.6. Drought damage model

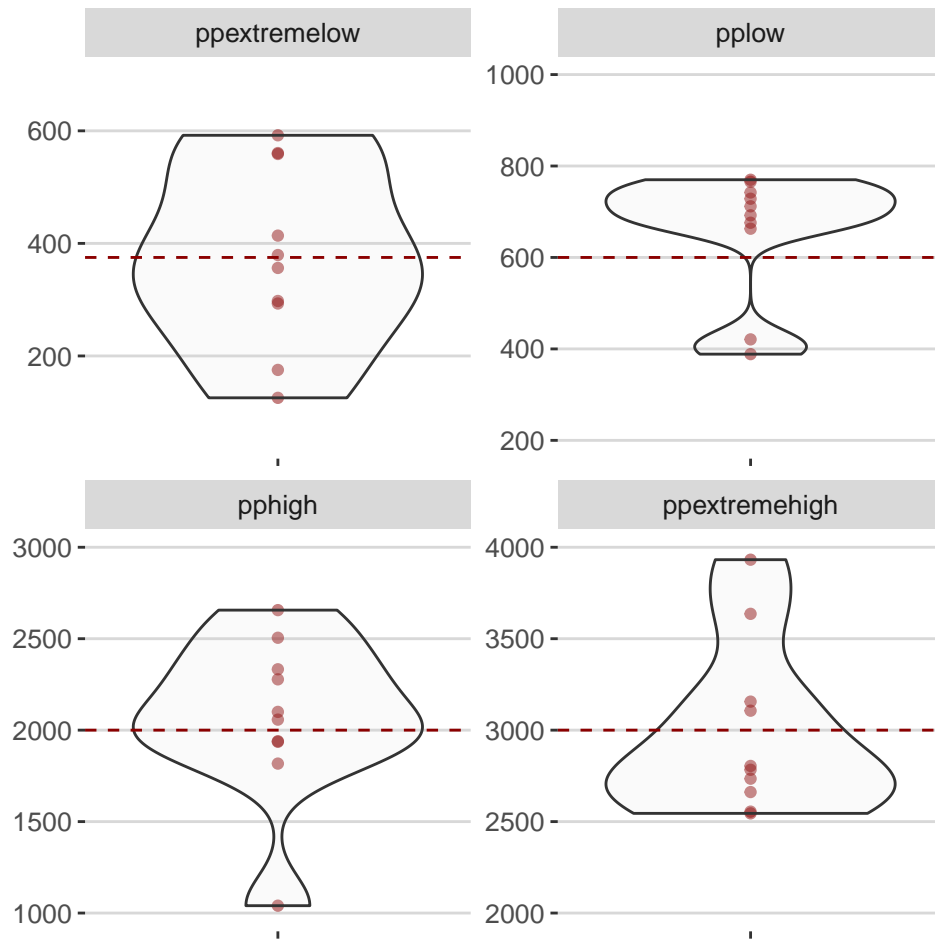


Figure 6: Drought damage model parameter values. Y-axis limits are lower and upper bounds used during calibration. Dashed line is initial parameter value.

2. Model outputs

2.1. Discrimination metrics

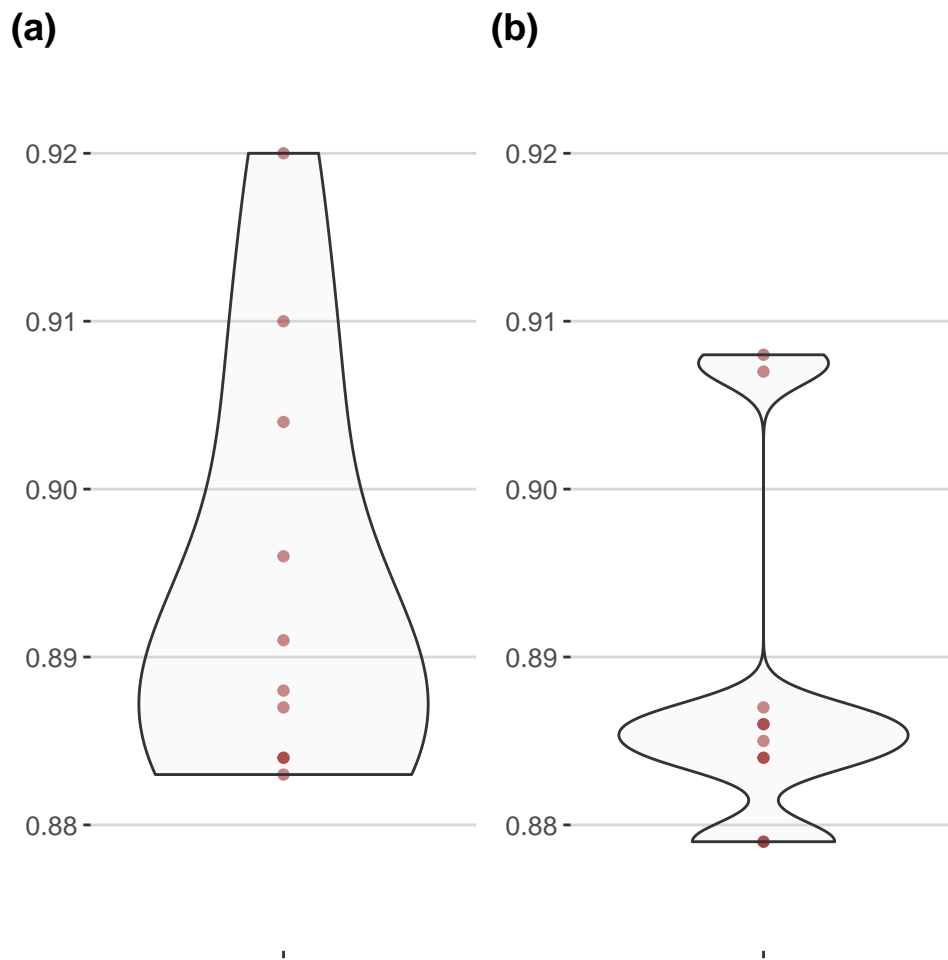


Figure 7: AUC on (a) calibration points and (b) every presence/absence points.

2.2. Reliability metrics

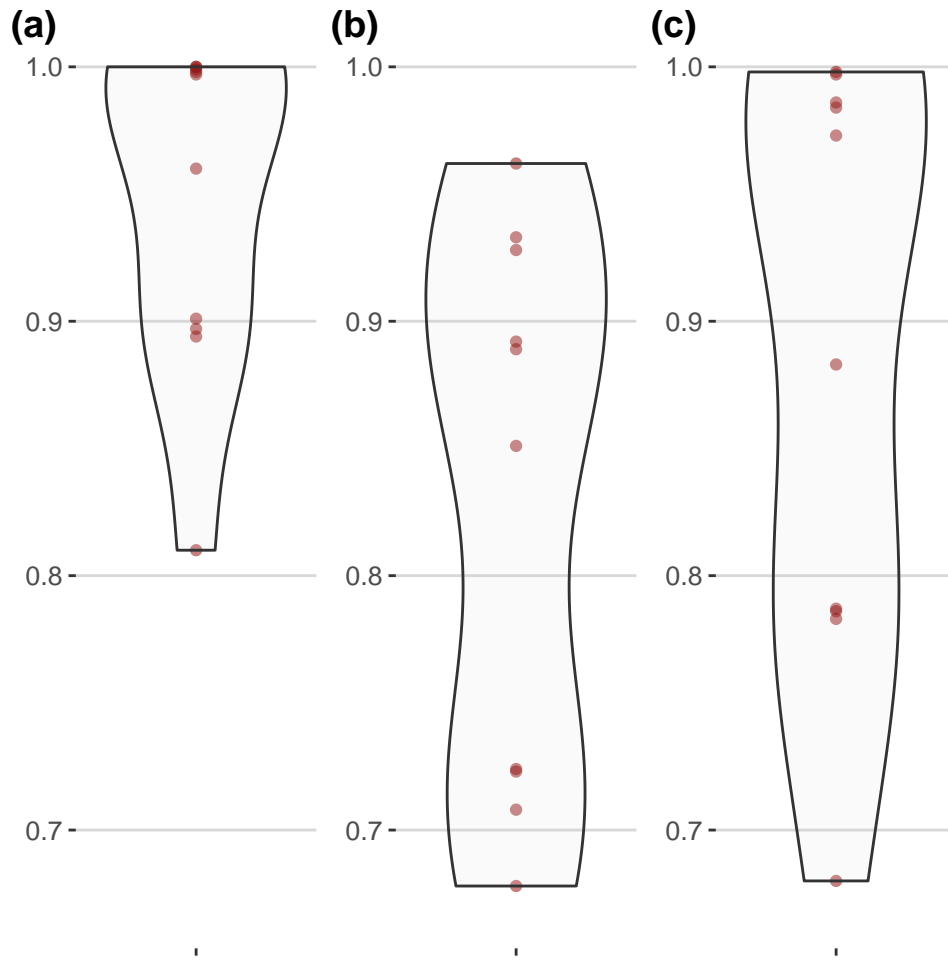


Figure 8: Boyce index on every presence points, with (a) Spearman correlation, (b) Pearson correlation and (c) Kendall correlation.

2.3. Species distribution

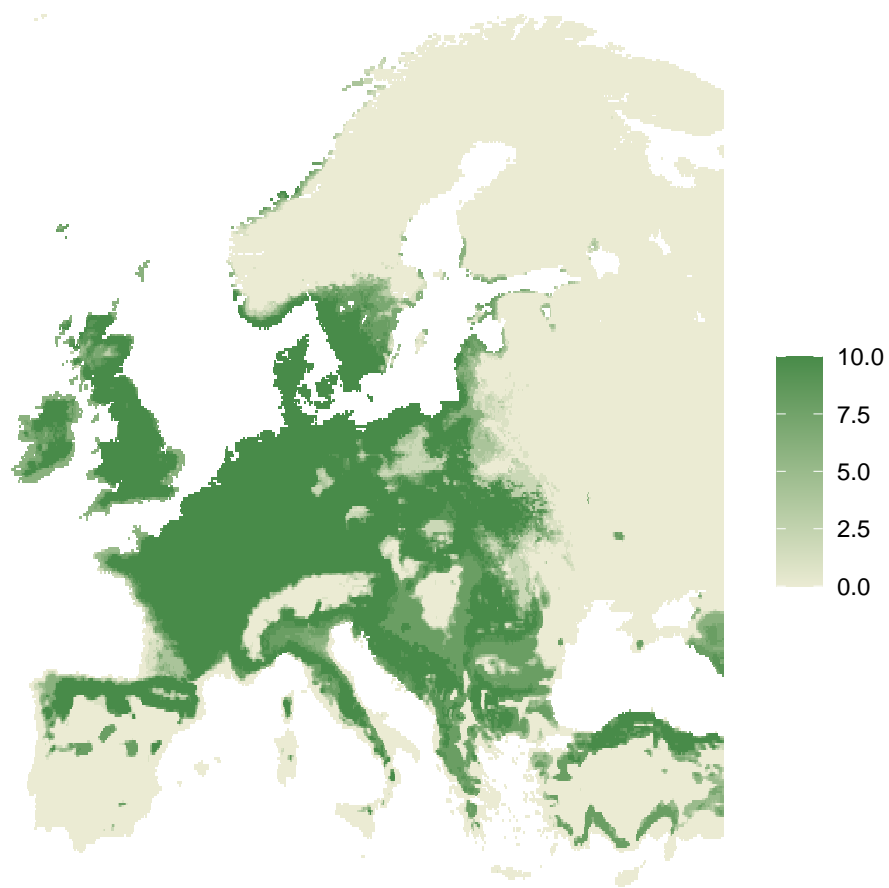


Figure 9: *Number of consensual presence predicted by models.*