Carry-over effect of a longer season on the following year's tree growth

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Introduction

Methods

Allometry

$$AGB = \beta_1 \times \left(RCD^2 \times H\right)^{\beta_2}$$

Main model

$$\Delta\beta_1 = N\left(\beta_1 + \beta_{S1}S_1 + \beta_{F1}F_1 + \beta_{SF1}SF_1, \sigma_{y1}\right)$$

$$\Delta\beta_2 = N\left(\beta_2 + \beta_{S2}S_1 + \beta_{F2}F_1 + \beta_{SF2}SF_1, \sigma_{y2}\right)$$

Where:

- β_1 = Year 1, treatment Cool Spring, Cool Fall (reference value)
- $\beta_1 + \beta_{S1}$ = Year 1, treatment Warm Spring, Cool Fall
- $\beta_1 + \beta_{F1}$ = Year 1, treatment Cool Spring, Warm Fall
- $\beta_1 + \beta_{S1} + \beta_{F1} + \beta_{SF1}$ = Year 1, treatment Warm Spring, Warm Fall
- $S1$ = dummy variable, if it's 1, then Warm spring, else Cool Spring
- $F1$ = dummy variable, if it's 1, then Warm fall, else Cool fall
- $SF1$ = dummy variable, for a subadditive effect of a Warm Spring and a Warm Fall treatment.

Results

Allometry

Main model

Discussion

Supplemental results

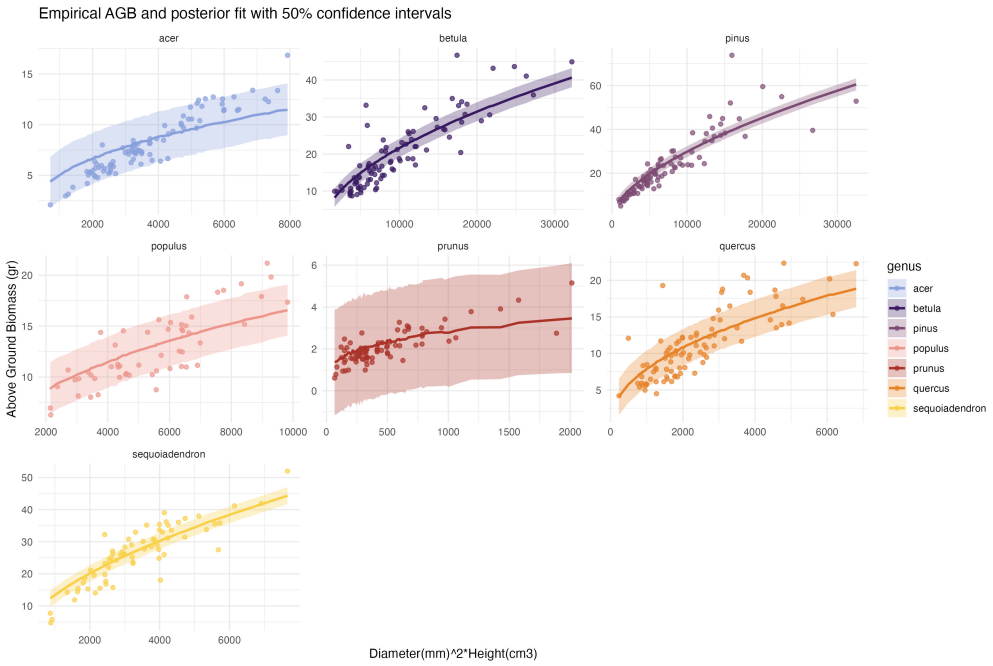
Empirical AGB and posterior fit with 50% confidence intervals
acer
betula
pinus
populus
prunus
quercus
sequoiadendron
Above Ground Biomass (gr)
Diameter(mm)^2*Height(cm3)
genus
acer
betula
pinus
populus
prunus
quercus
sequoiadendron

Figure 1:

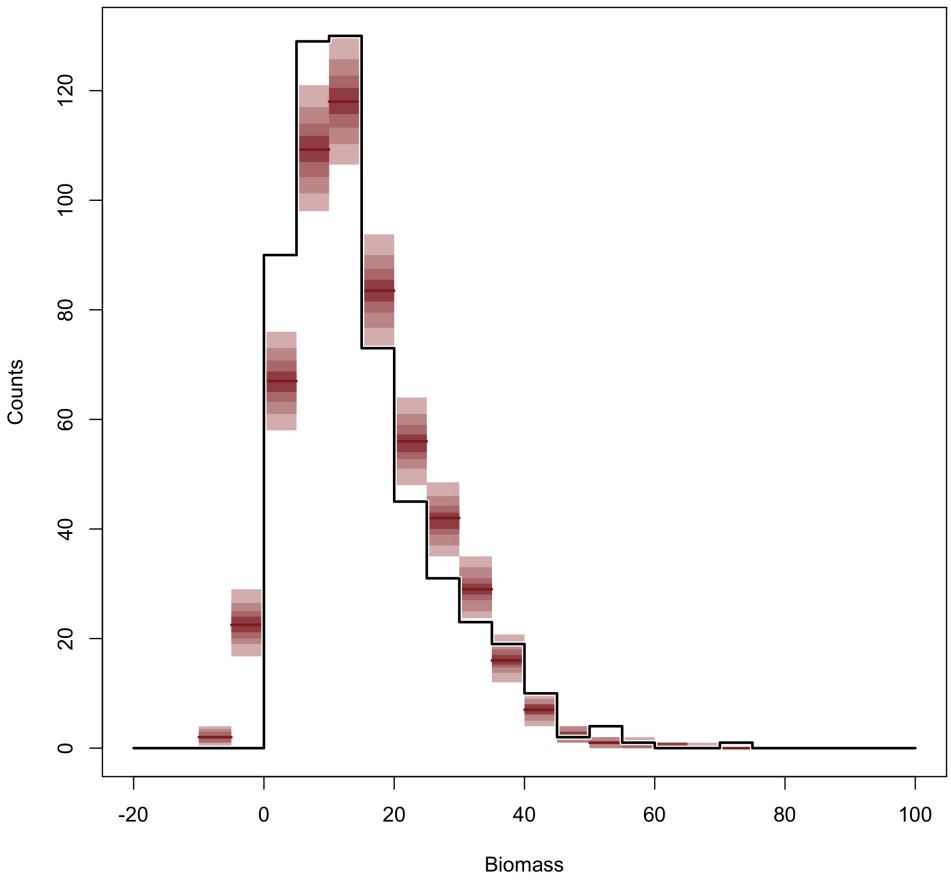

Figure 2: