de Lera Garrido A., Gobakken T., Ørka H.O., Næsset E., Bollandsås O.M. (2022). Estimating forest attributes in airborne laser scanning based inventory using calibrated predictions from external models. Silva Fennica vol. 56 no. 2 article id 10695. https://doi.org/10.14214/sf.10695
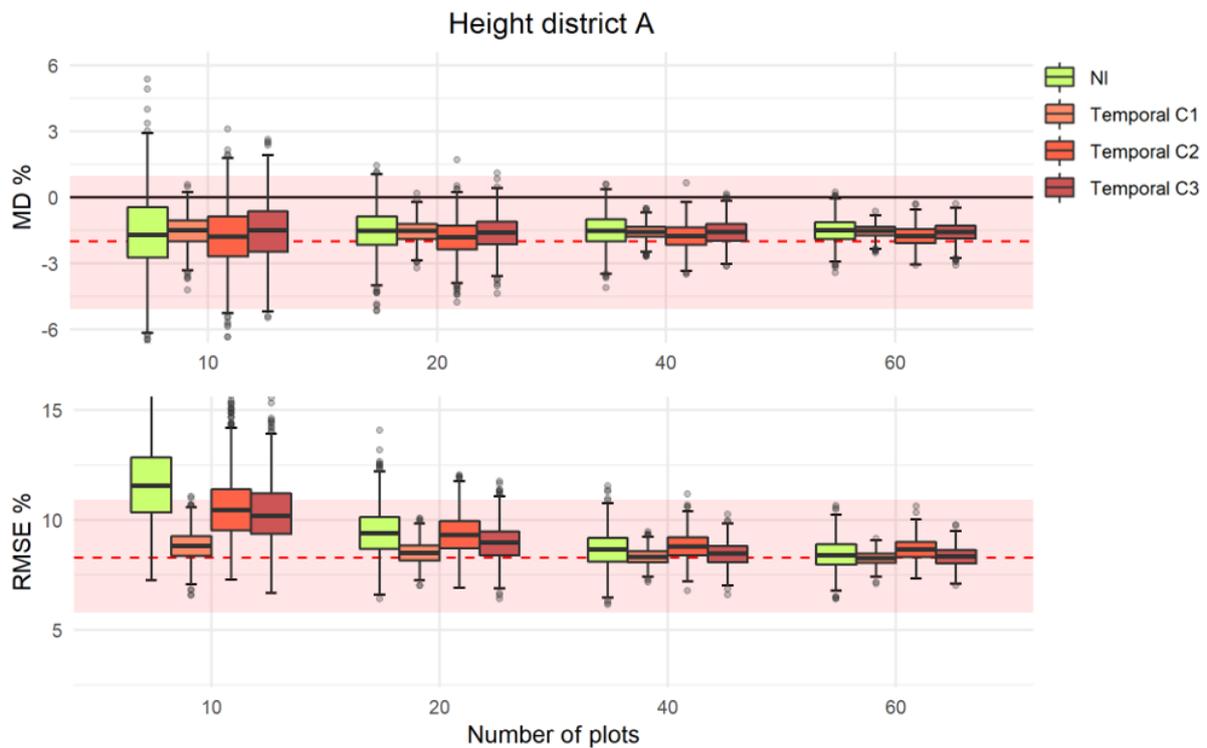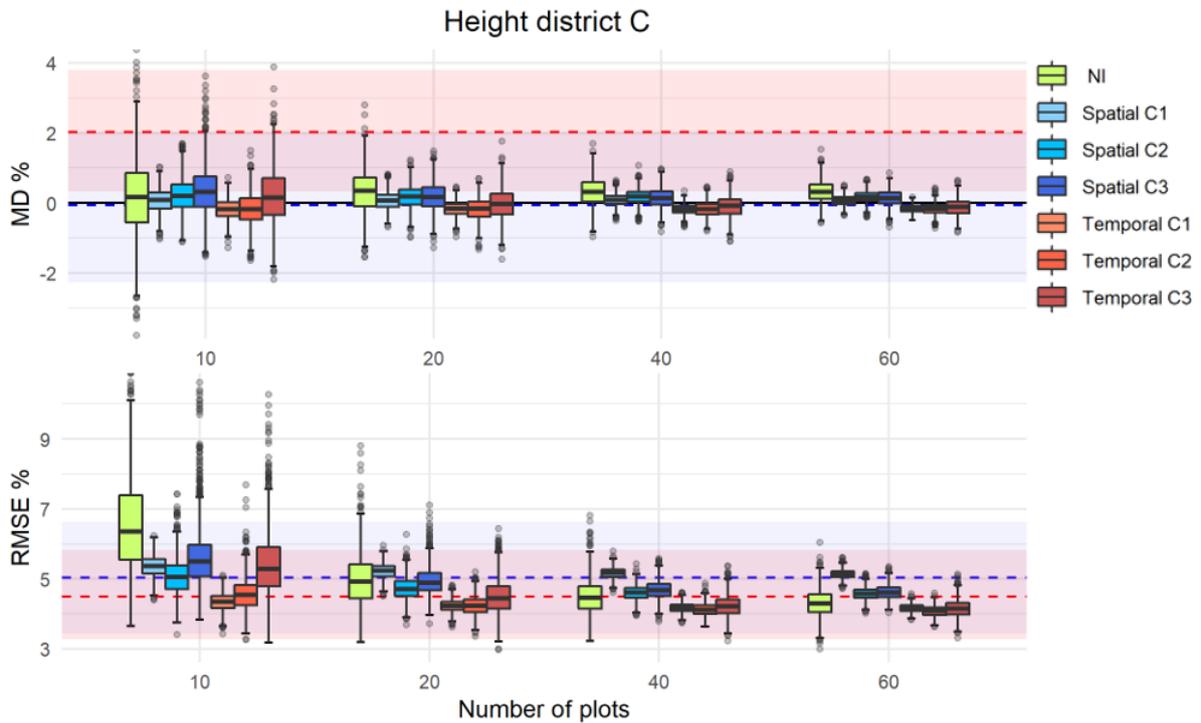
Supplementary file S1: Accuracy results of the simulations using the different approaches
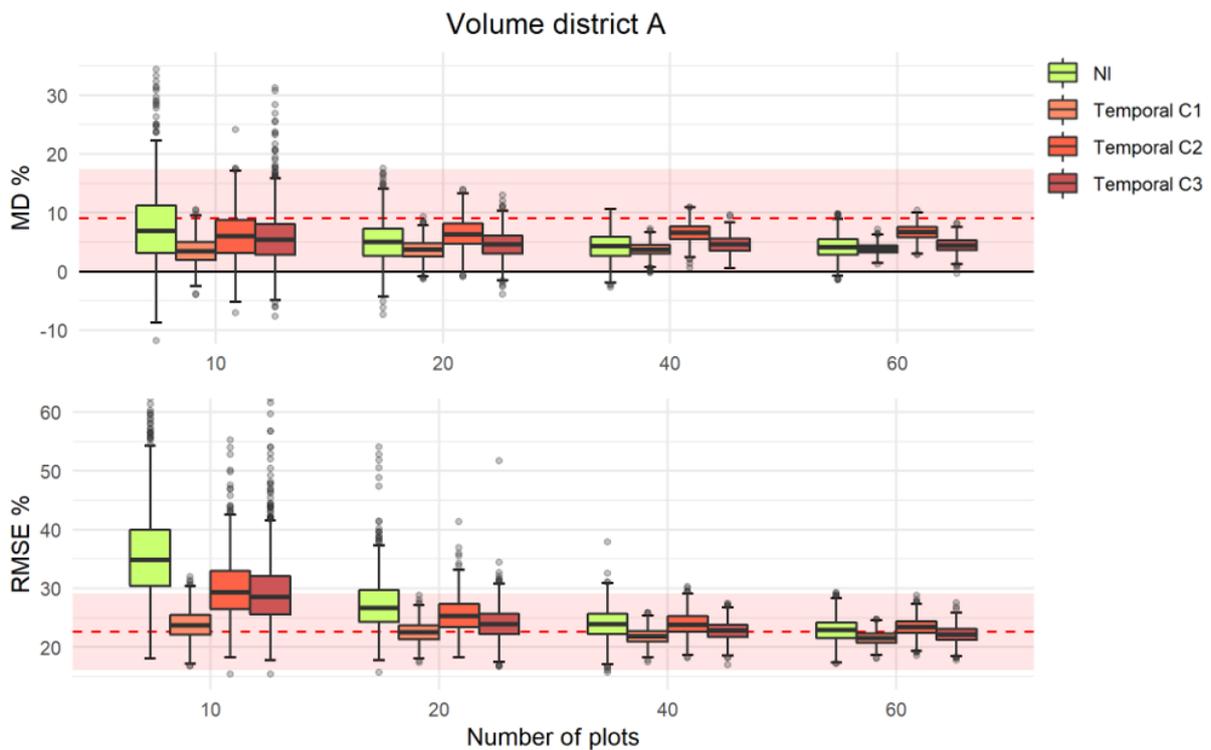
Differences between estimates based on the approaches and the field observations are displayed in Figures S1-S6. Each figure shows the distributions of MD% and RMSE% from the 1000 iterations as boxplots for each number of calibration plots used, and the different approaches are displayed in different colors. Due to big outliers and better visualizing the boxplots when larger sample sizes are used, the figures are not displayed in their full extend. This visualization choice did not affect the underlying data but caused the omission of some outliers.
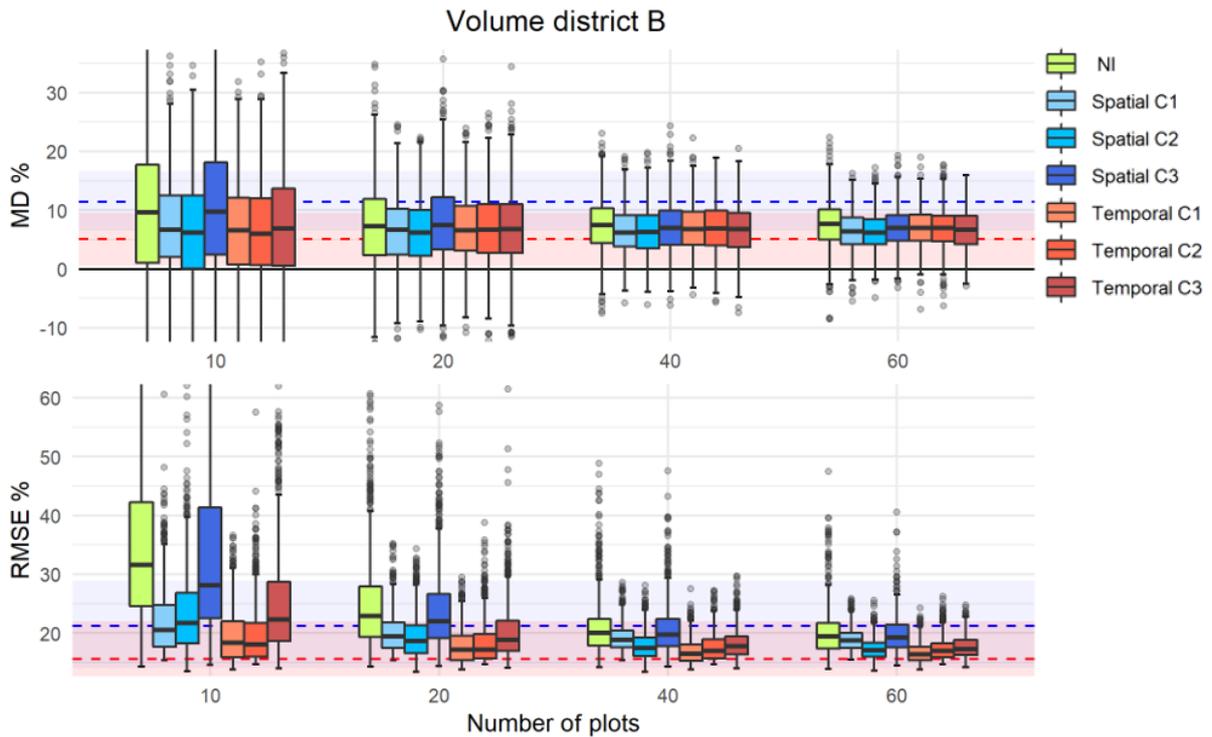

Figure S1. MD% (upper) and RMSE% (lower) distributions from 1000 iterations in simulations of different calibration approaches (as boxplots) using external prediction models of dominant height in district A. The uncalibrated external predictions are displayed with a red dashed line, and the corresponding confidence intervals are displayed as colored areas around it.
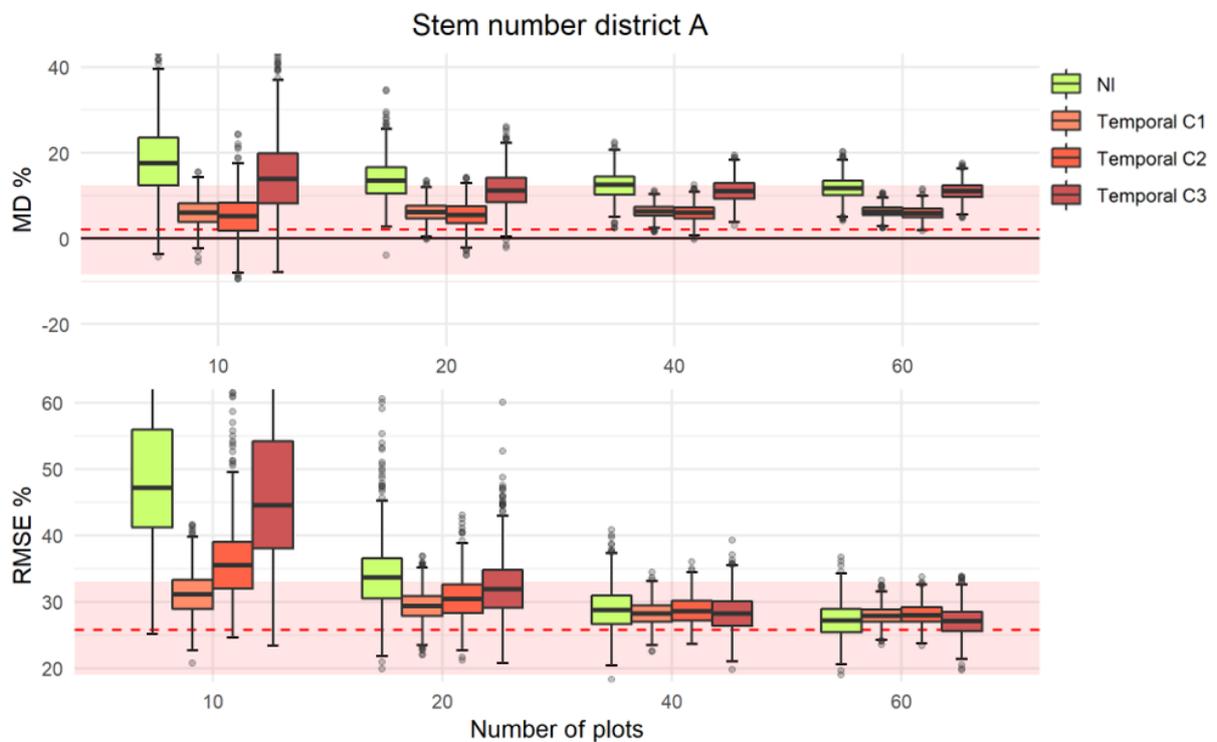
Figure S2. MD% (upper) and RMSE% (lower) distributions from 1000 iterations in simulations of different calibration approaches (as boxplots) using external prediction models of dominant height in district C. The uncalibrated external predictions are displayed with dashed lines (blue = spatial, red = temporal) with the corresponding confidence intervals as colored areas around the respective lines.
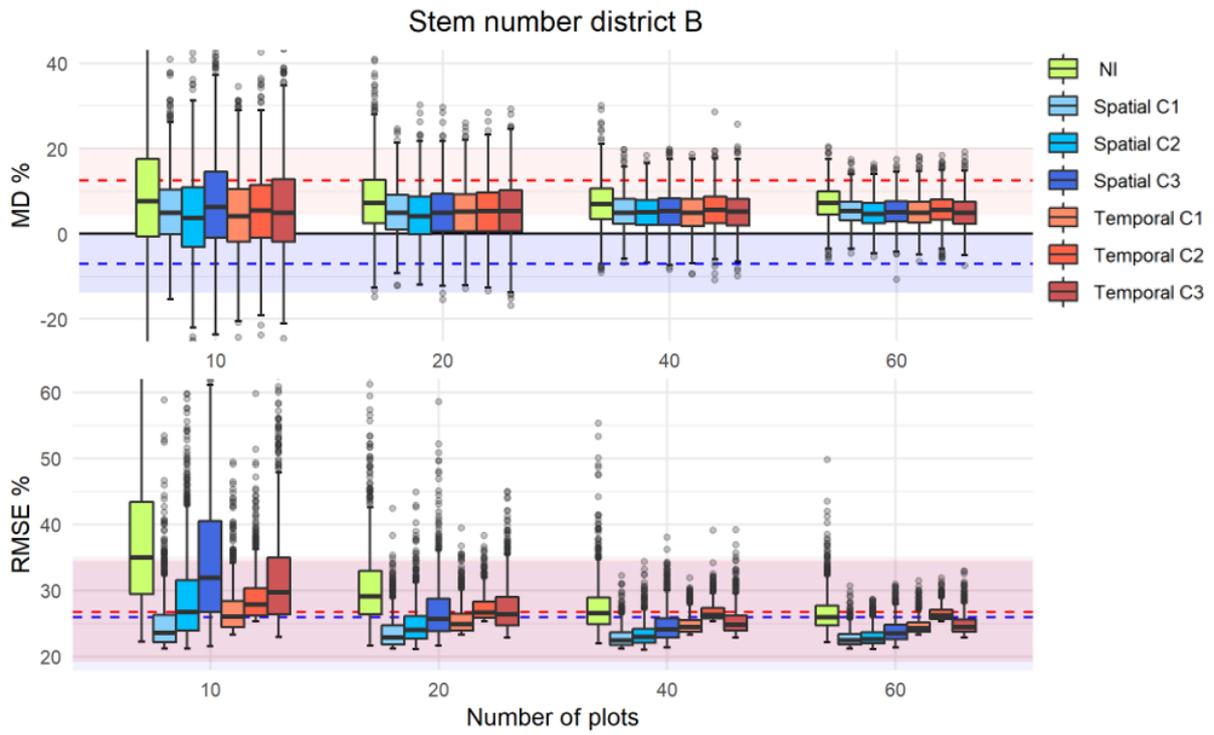

Figure S3. MD% and RMSE% distributions from 1000 iterations in simulations of different calibraton approaches (as boxplots) using external prediction models of volume in district C. The MD% (upper panel) and RMSE% (lower panel) of the uncalibrated external predictions is displayed with a red dashed line, and the corresponding confidence interval is displayed as colored areas around it.

Figure S4. MD% (upper) and RMSE% (lower) distributions from 1000 iterations in simulations of different calibration approaches (as boxplots) using external prediction models of volume in district B. The uncalibrated external predictions are displayed with dashed lines (blue = spatial, red = temporal) with the corresponding confidence intervals as colored areas around the respective lines.

Figure S5. MD% (upper) and RMSE% (lower) distributions from 1000 iterations in simulations of different calibration approaches (as boxplots) using external prediction models of stem number in district A. The uncalibrated external predictions are displayed with a red dashed line, and the corresponding confidence intervals are displayed as colored areas around it.

Figure S6. MD% (upper) and RMSE% (lower) distributions from 1000 iterations in simulations of different calibration approaches (as boxplots) using external prediction models of stem number in district B. The uncalibrated external predictions are displayed with dashed lines (blue = spatial, red = temporal) with the corresponding confidence intervals as colored areas around the respective lines.