

Why Use Hierarchical Bayesian Modeling?

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Hierarchical Bayesian Modeling

What is it?

Hierarchical models (also known as multilevel models or mixed effects models) are an extension of linear modeling which account for a hierarchical structure in the data such as ecosubsections within ecosections or even provinces. This thesis implements *Bayesian* hierarchical models to accomplish small area estimation on forest attributes, meaning that these models do not only take into account the hierarchical structure of the data, but they also prior information about the covariates in the model.

where the coefficients of the explanatory variables are assigned a prior distribution.

Why use it?

do not need indepenctee of observations

Example