

**Mapping relative forest maturity and stand development for conservation in continental USA**

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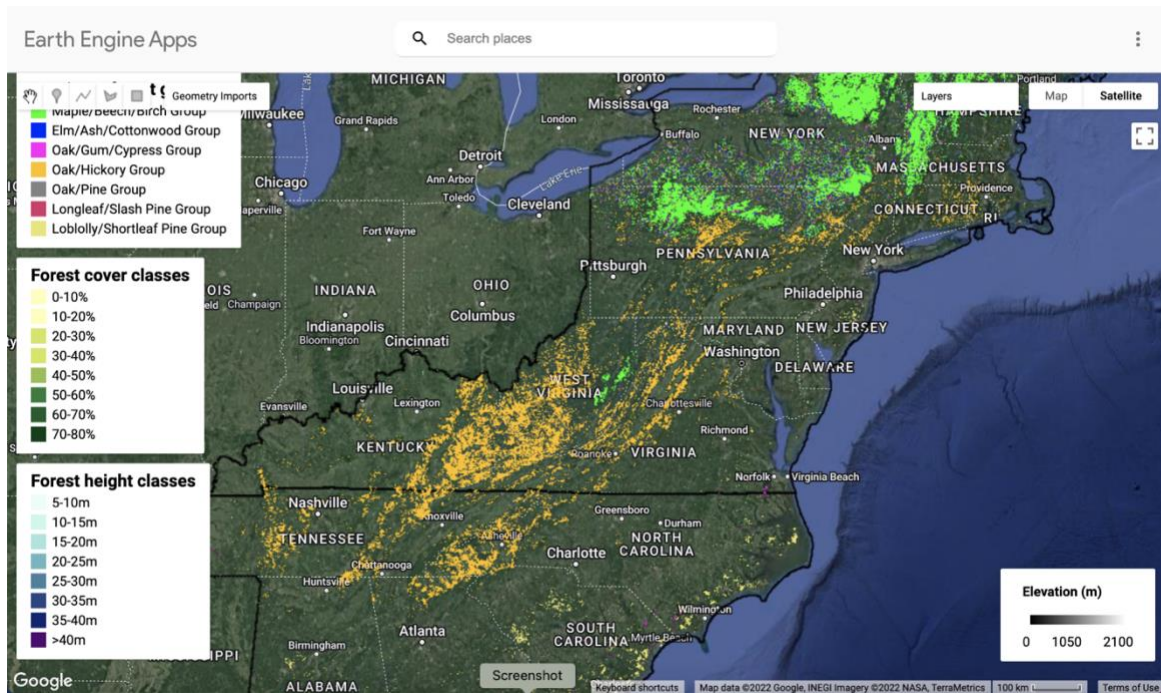
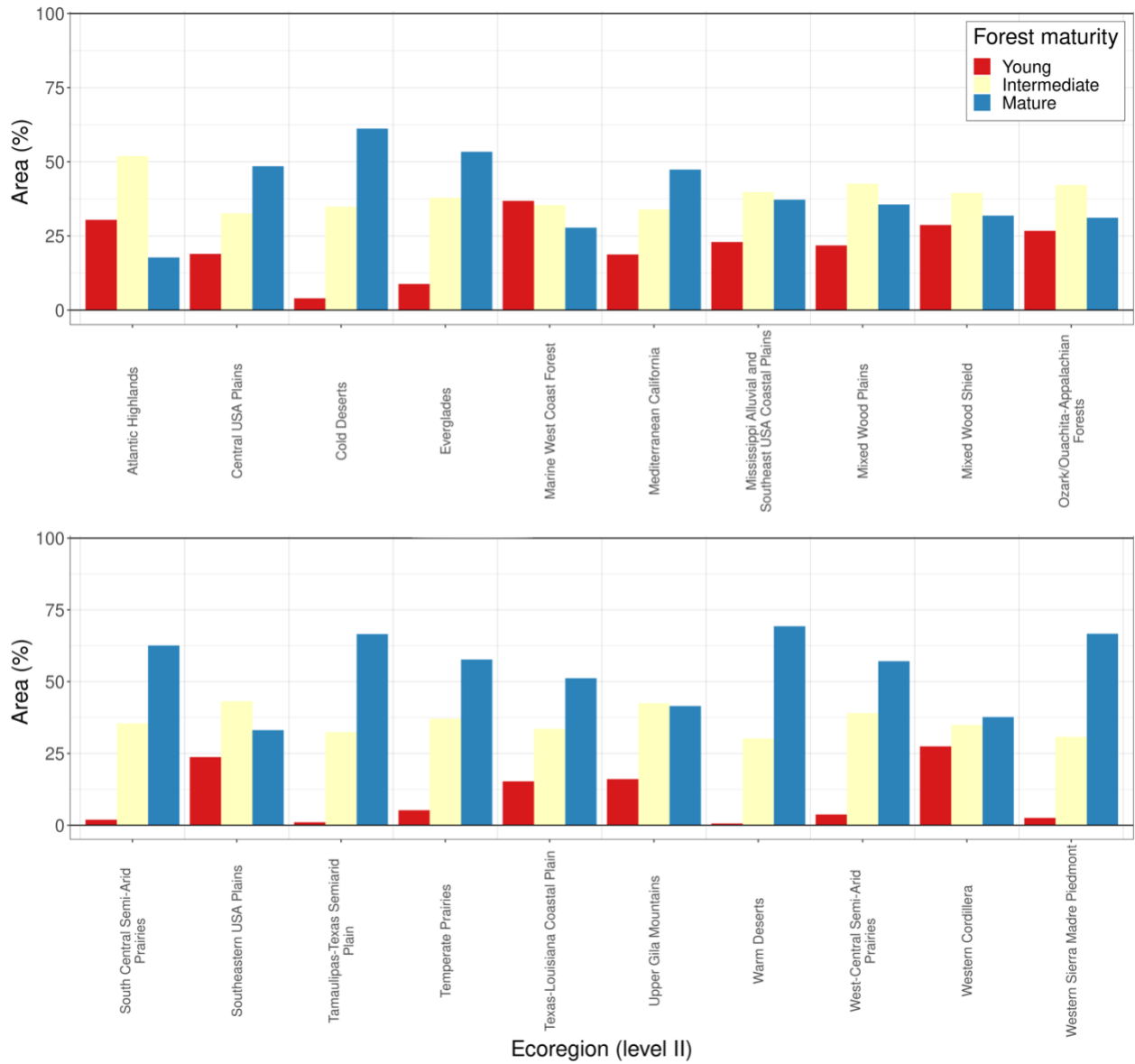
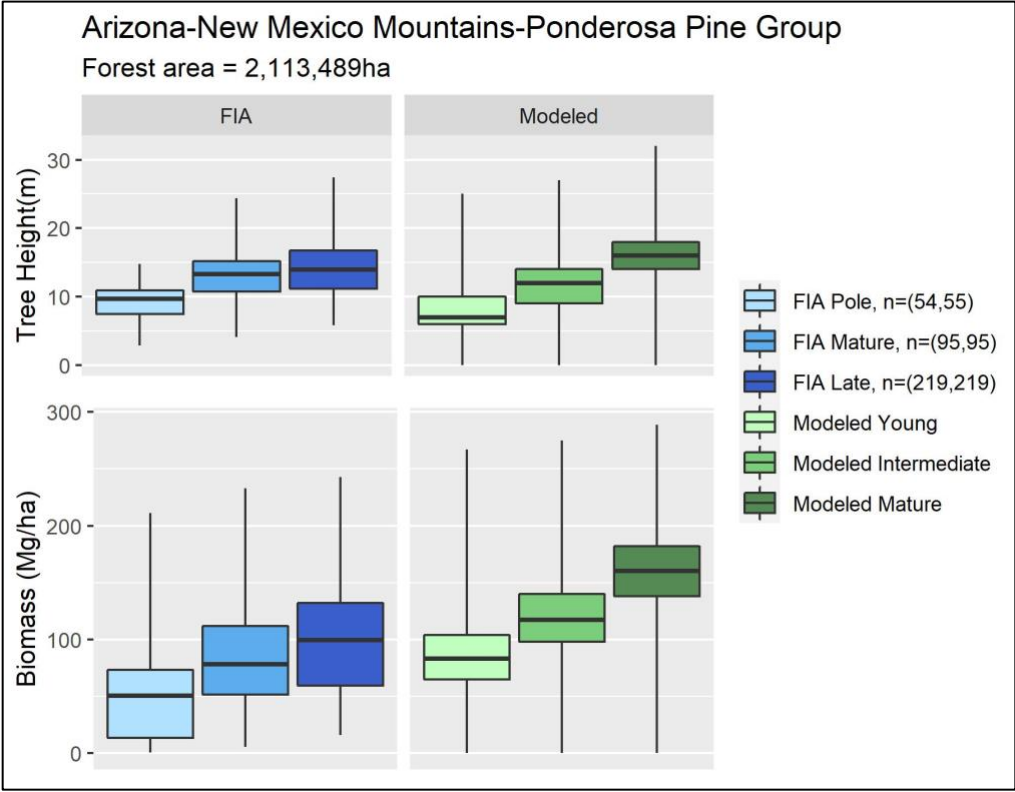
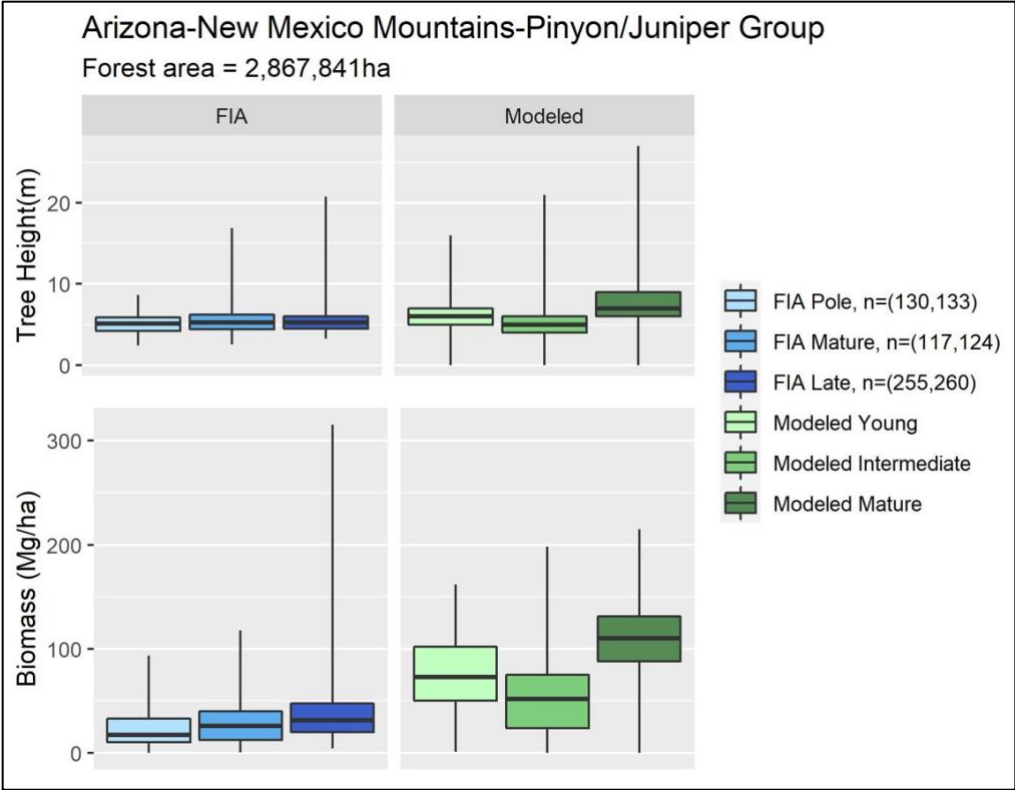
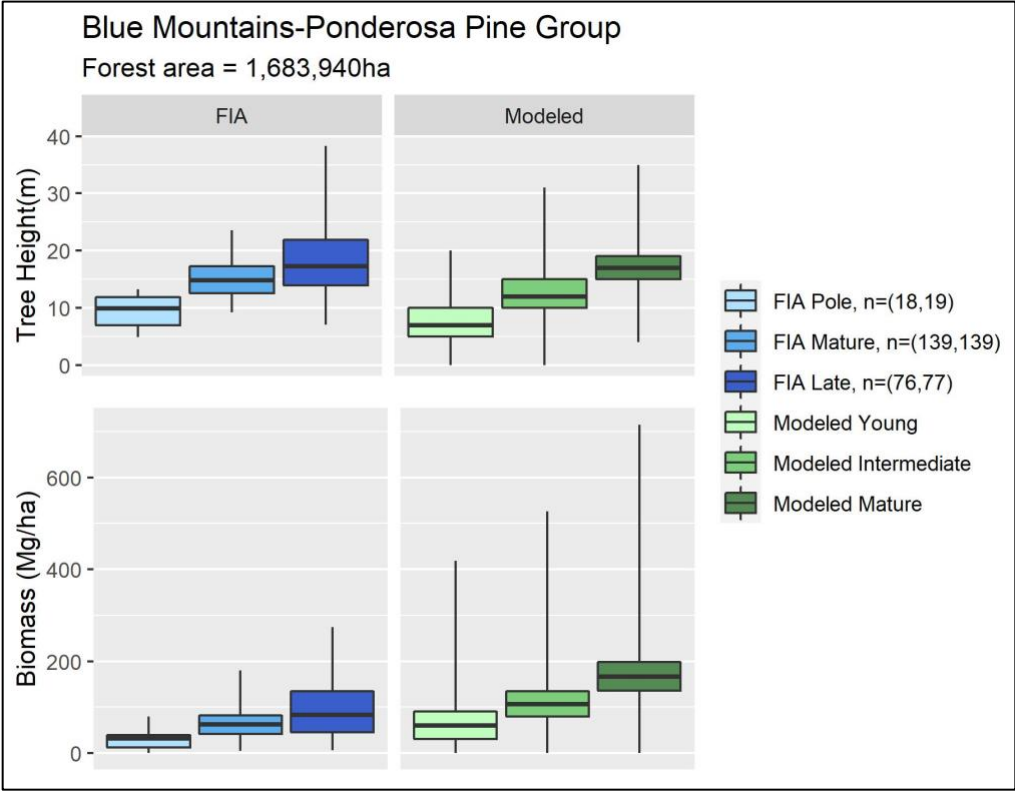
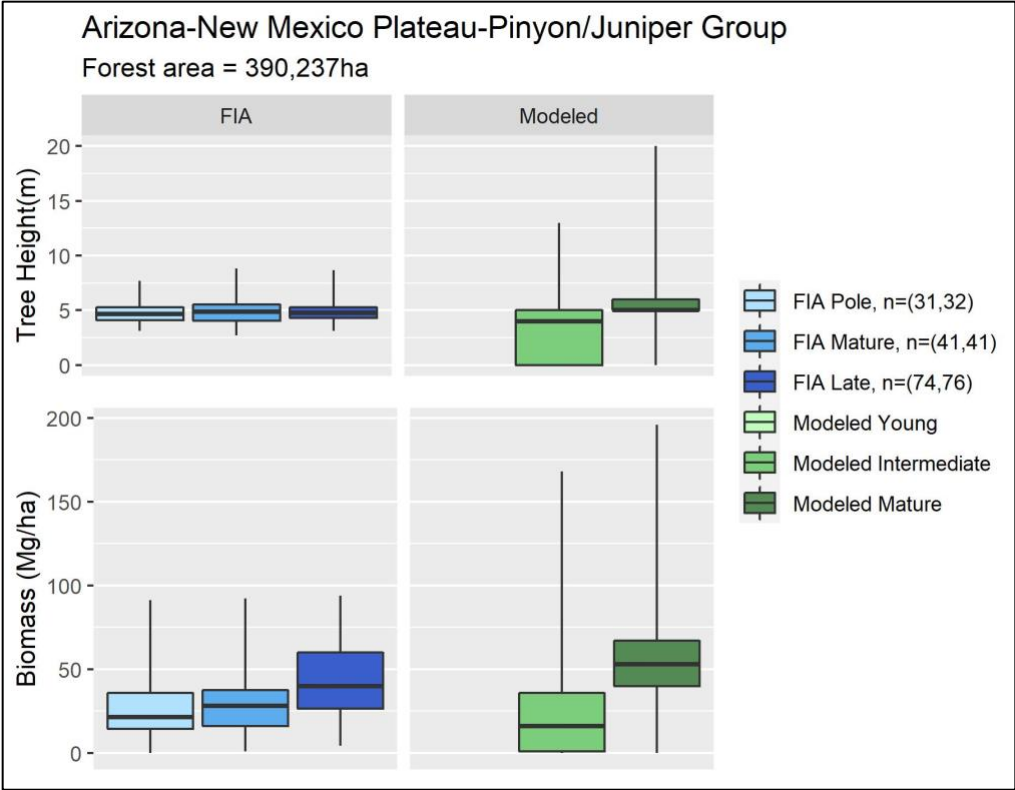


Fig. SI1 Screen shot of one of the interacting mapping apps developed for the expert workshops



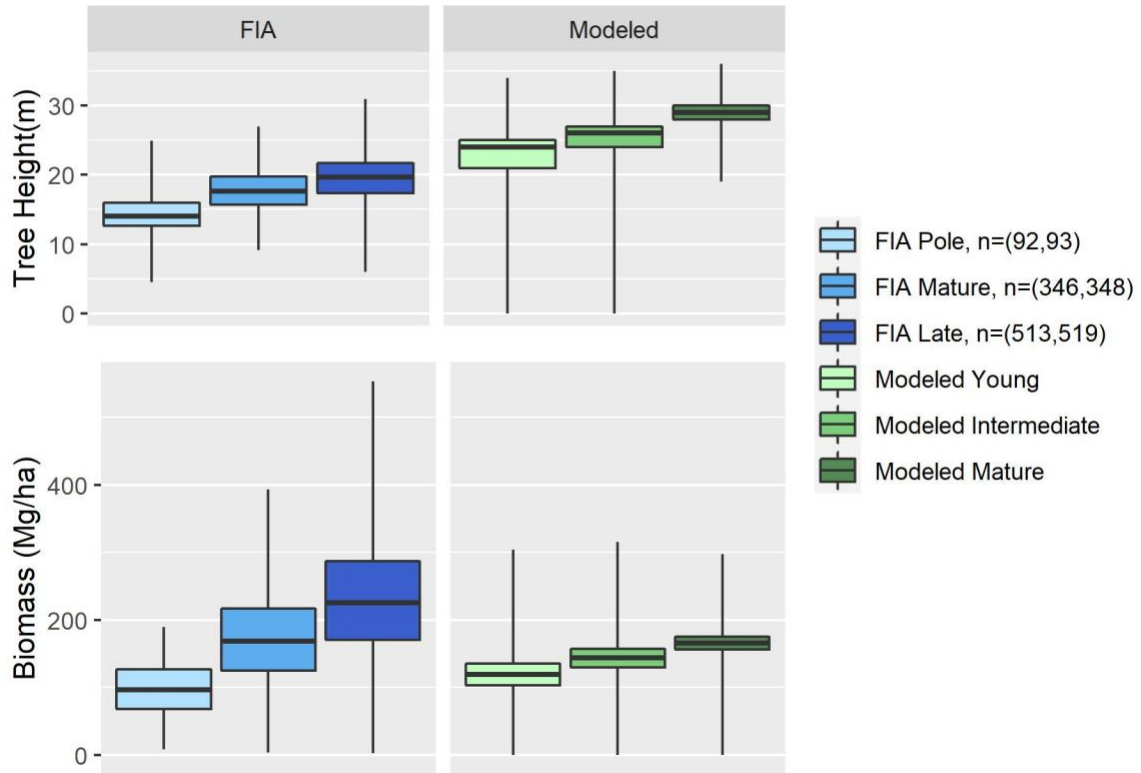
**Fig. SI2** The percentage area of young, intermediate and mature forest within USA Ecoregions Level II. The three categories of maturity are based on the 10 ranked forest maturity classes (Figure 2): young 1-3; intermediate 4-6; mature 7-9





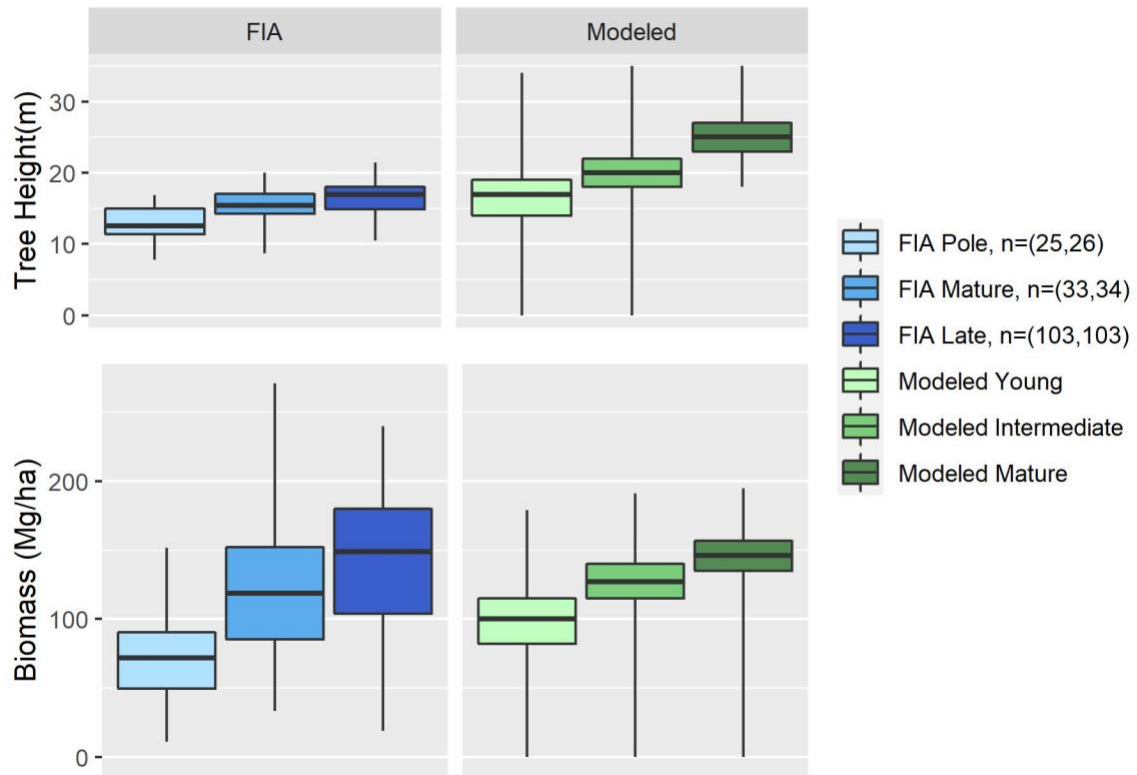
# Blue Ridge-Oak/Hickory Group

Forest area = 4,002,078ha



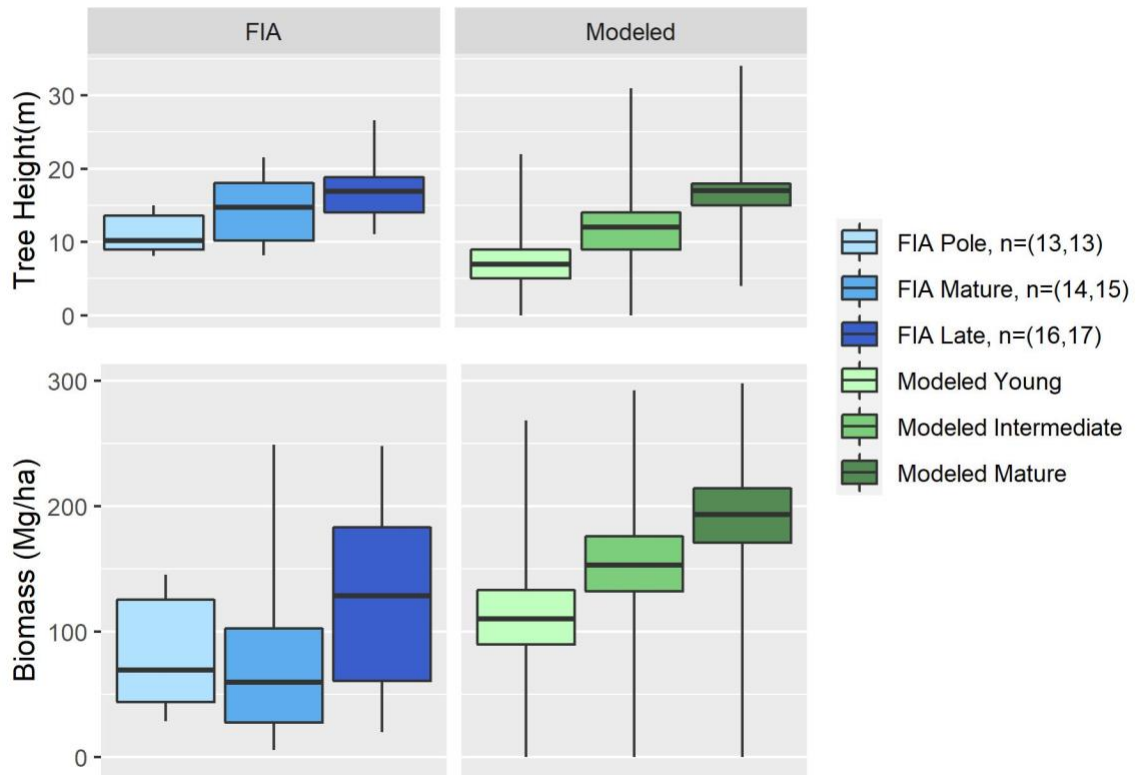
# Boston Mountains-Oak/Hickory Group

Forest area = 1,124,553ha



# Canadian Rockies-Fir/Spruce/Mountain Hemlock Group

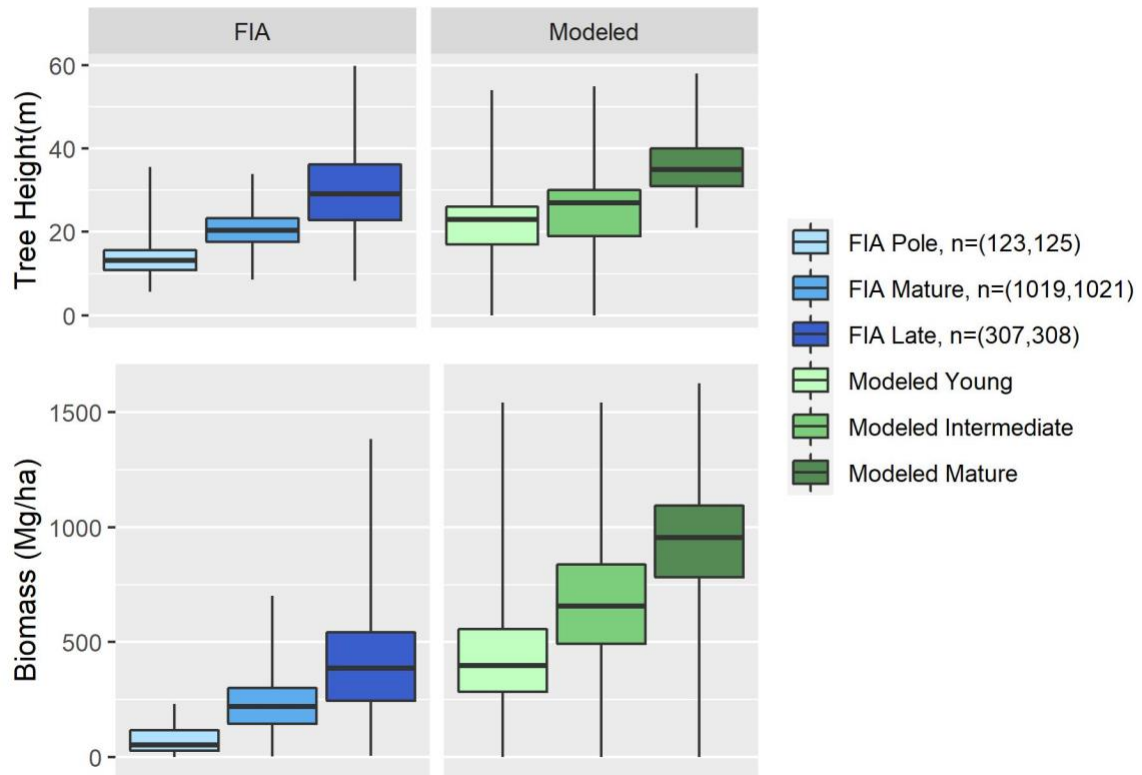
Forest area = 1,042,686ha





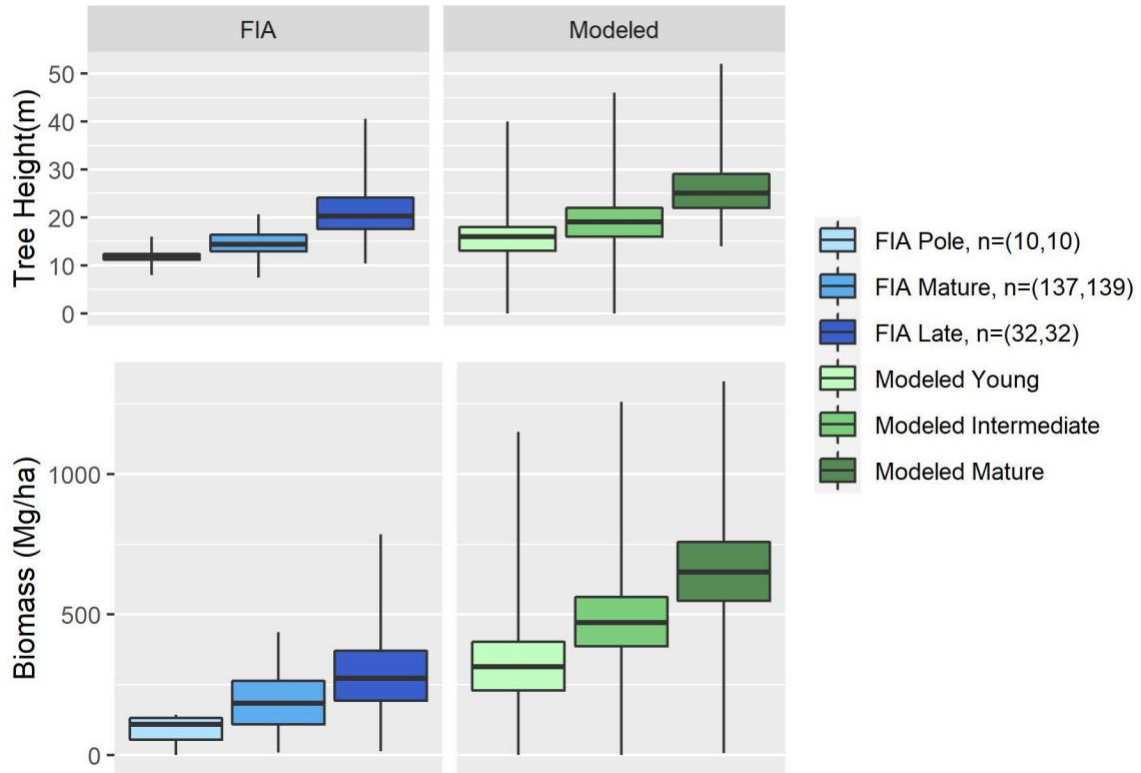
# Cascades-Douglas-fir Group

Forest area = 3,757,767ha



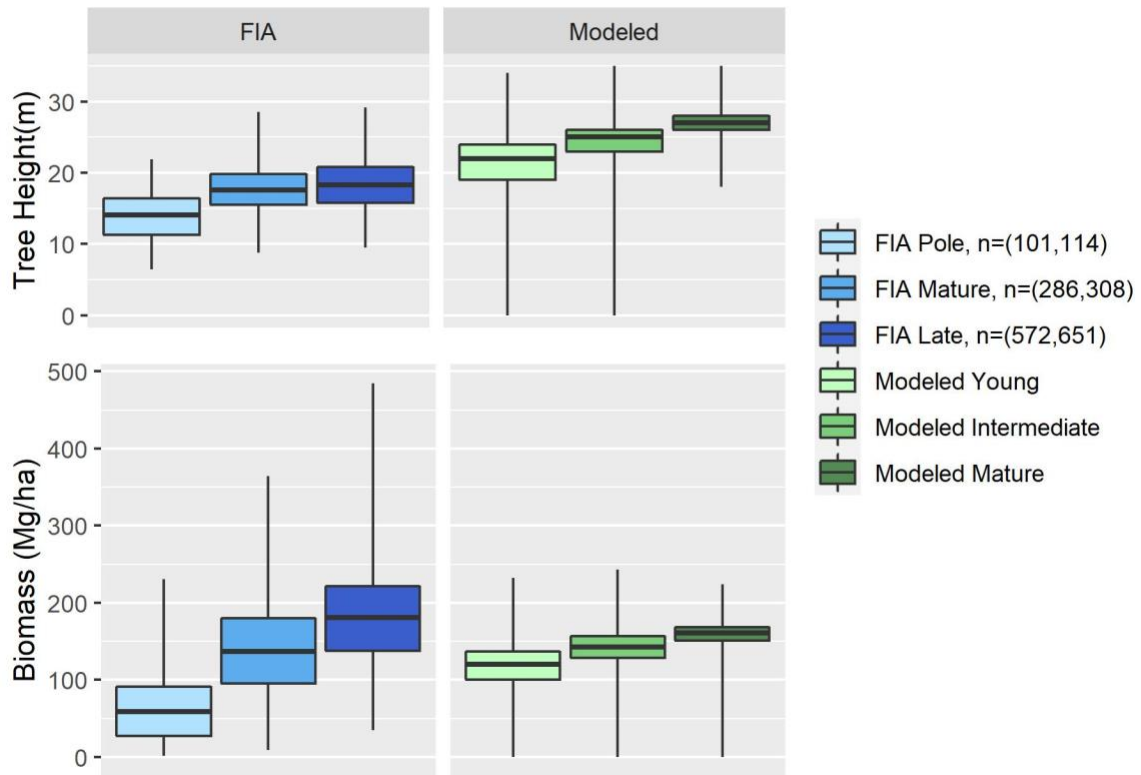
# Cascades-Fir/Spruce/Mountain Hemlock Group

Forest area = 1,417,182ha



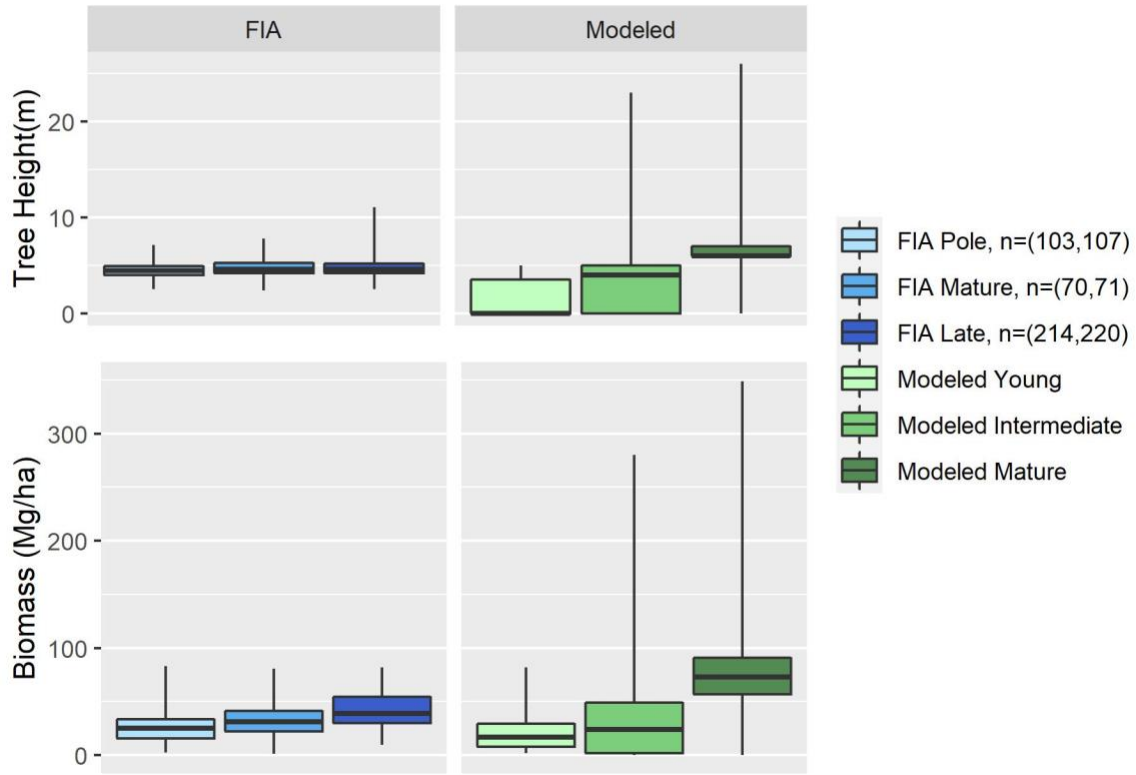
# Central Appalachians-Oak/Hickory Group

Forest area = 5,100,302ha



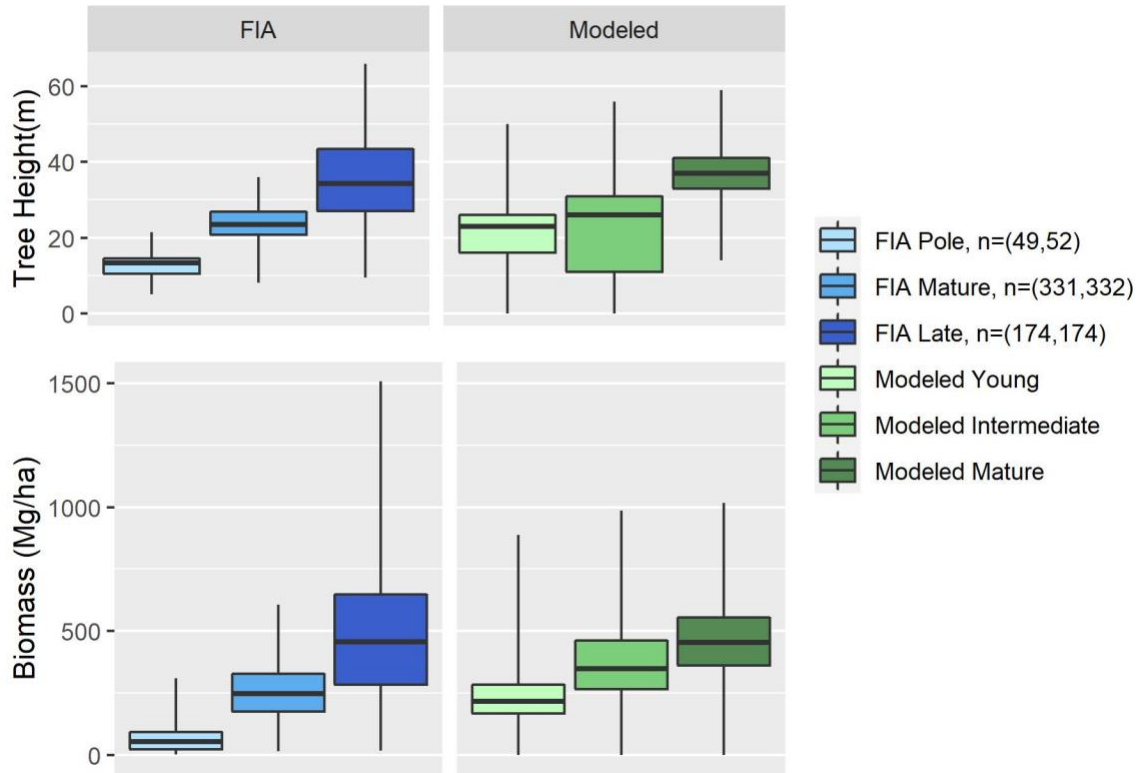
# Central Basin and Range-Pinyon/Juniper Group

Forest area = 2,030,904ha



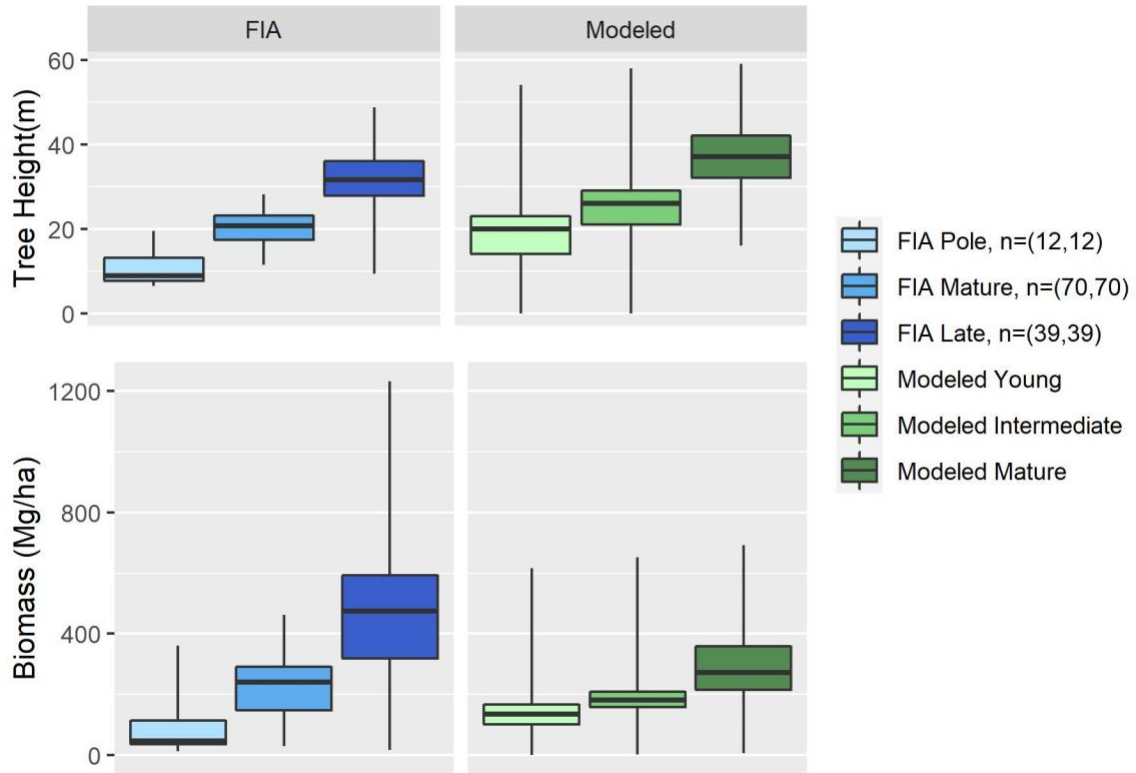
# Coast Range-Douglas-fir Group

Forest area = 3,284,700ha



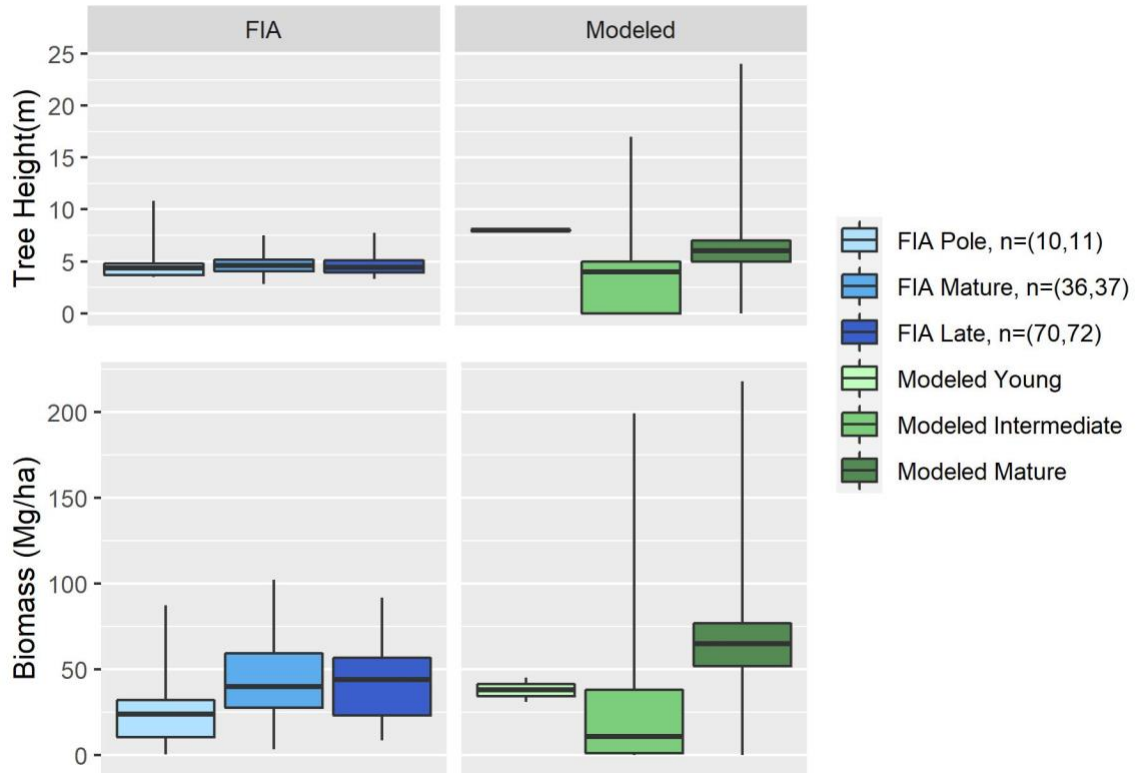
# Coast Range-Hemlock/Sitka Spruce Group

Forest area = 1,189,055ha



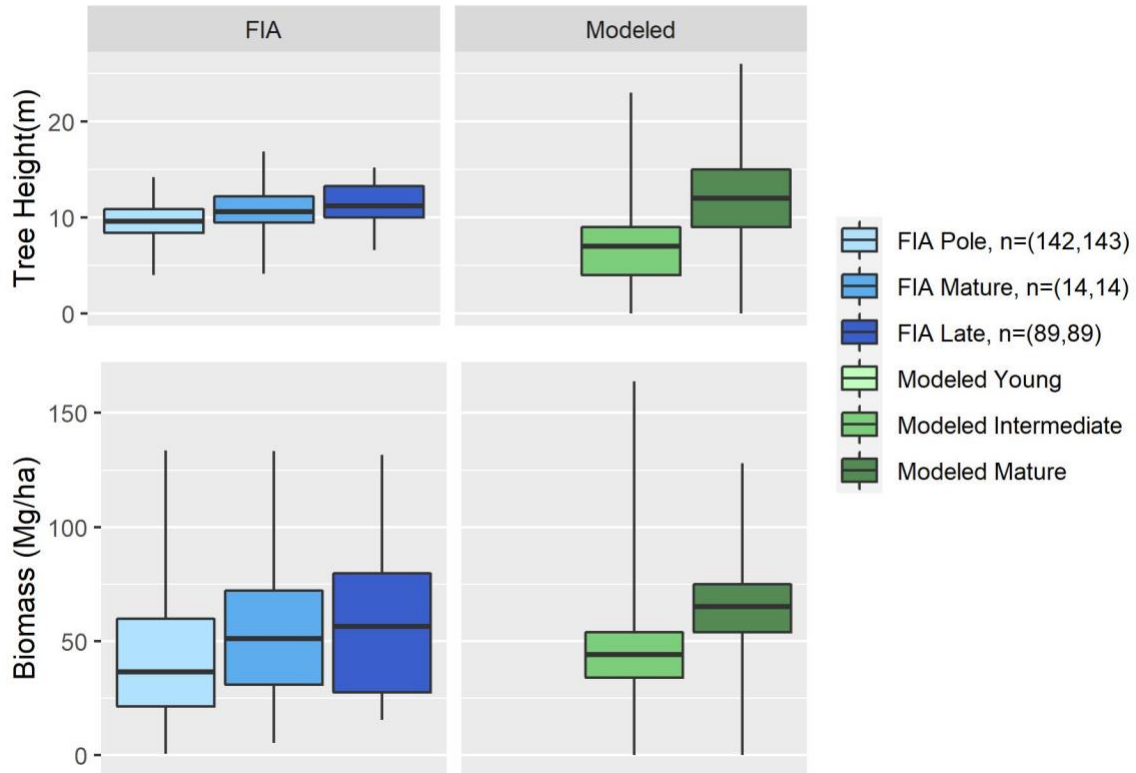
# Colorado Plateaus-Pinyon/Juniper Group

Forest area = 1,014,130ha



# Cross Timbers-Oak/Hickory Group

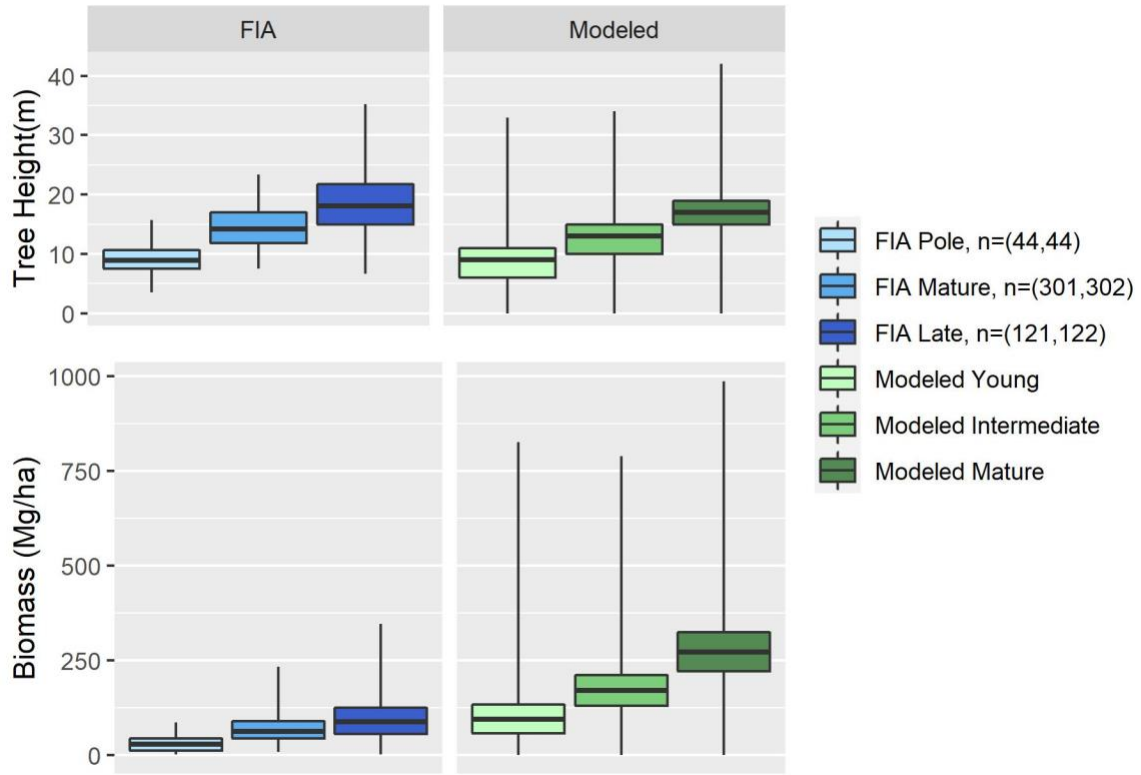
Forest area = 1,354,234ha





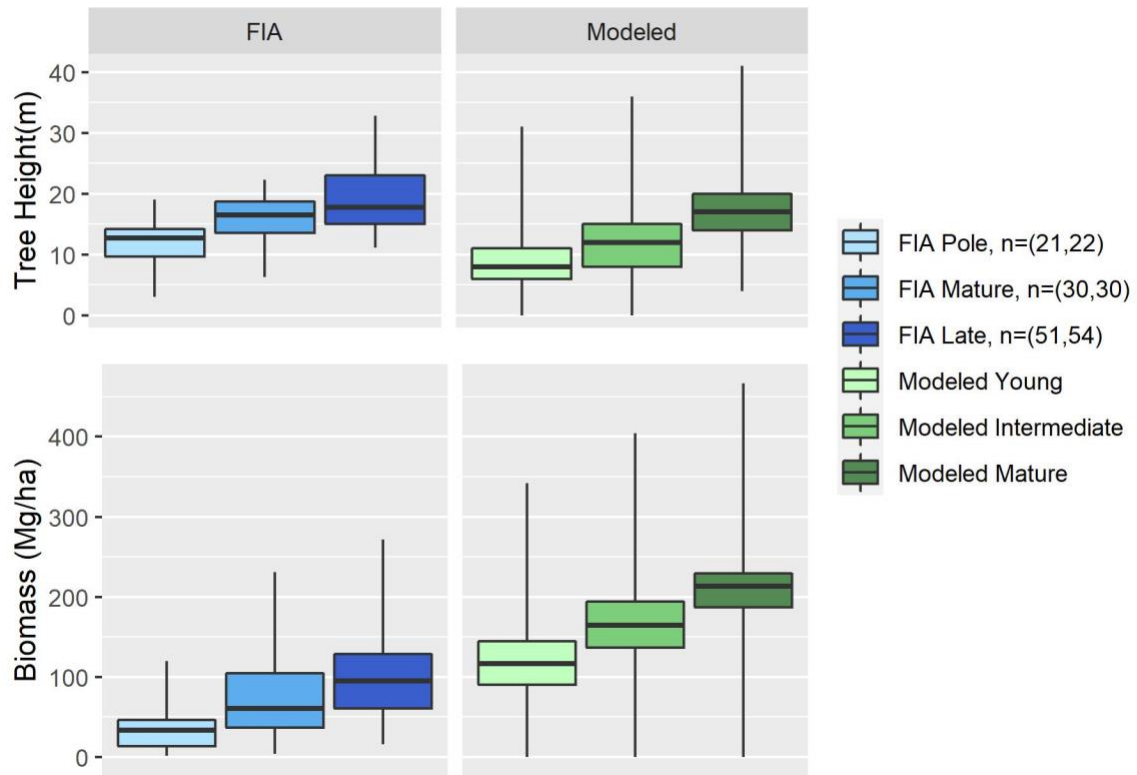
# Eastern Cascades Slopes and Foothills-Ponderosa Pine Group

Forest area = 1,934,222ha



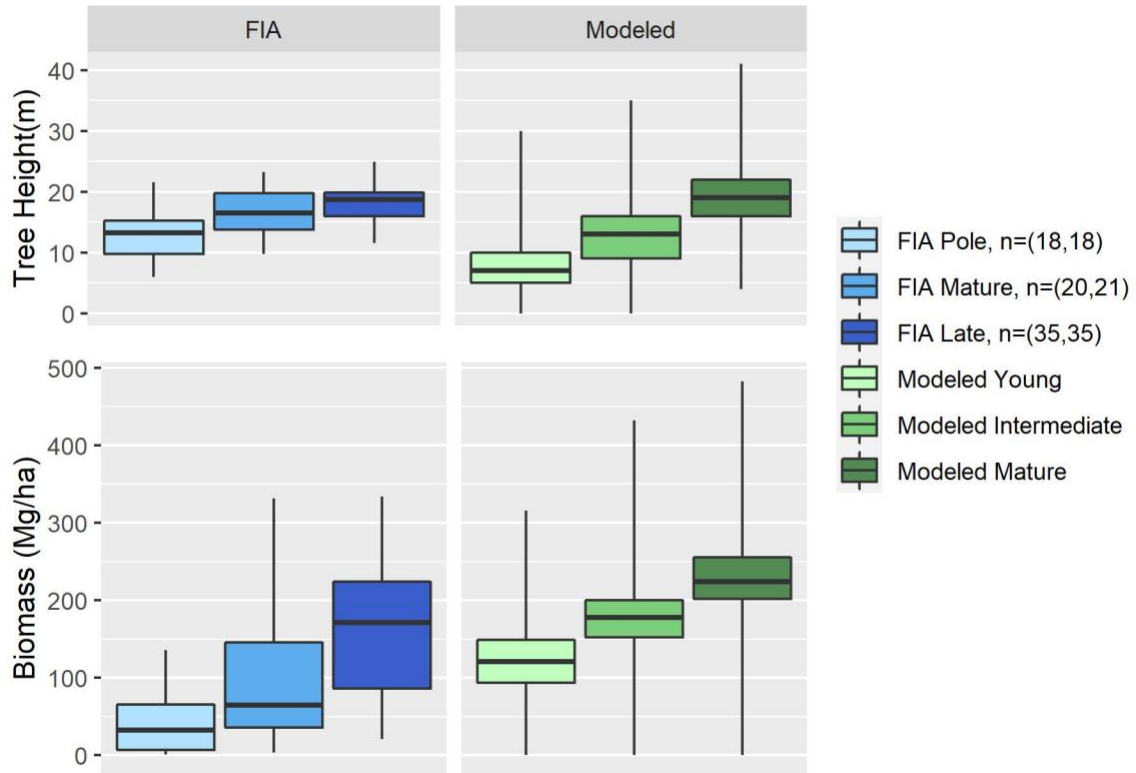
# Idaho Batholith-Douglas-fir Group

Forest area = 2,160,130ha



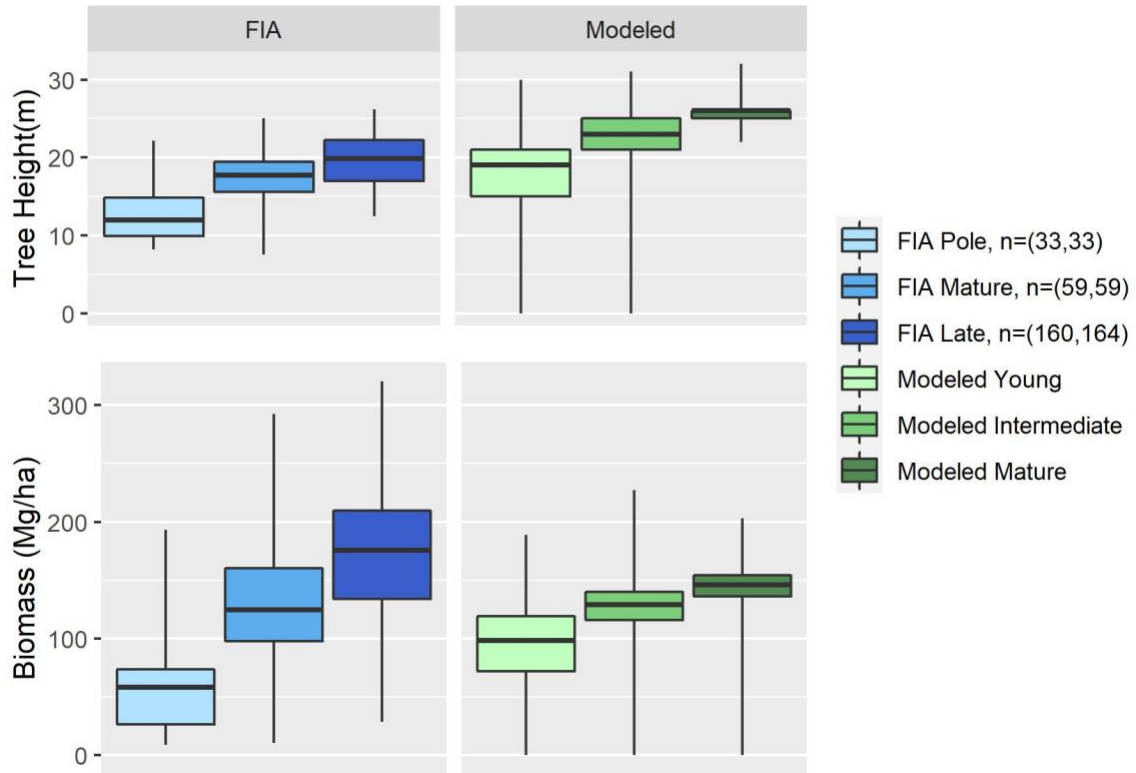
# Idaho Batholith-Fir/Spruce/Mountain Hemlock Group

Forest area = 1,582,282ha

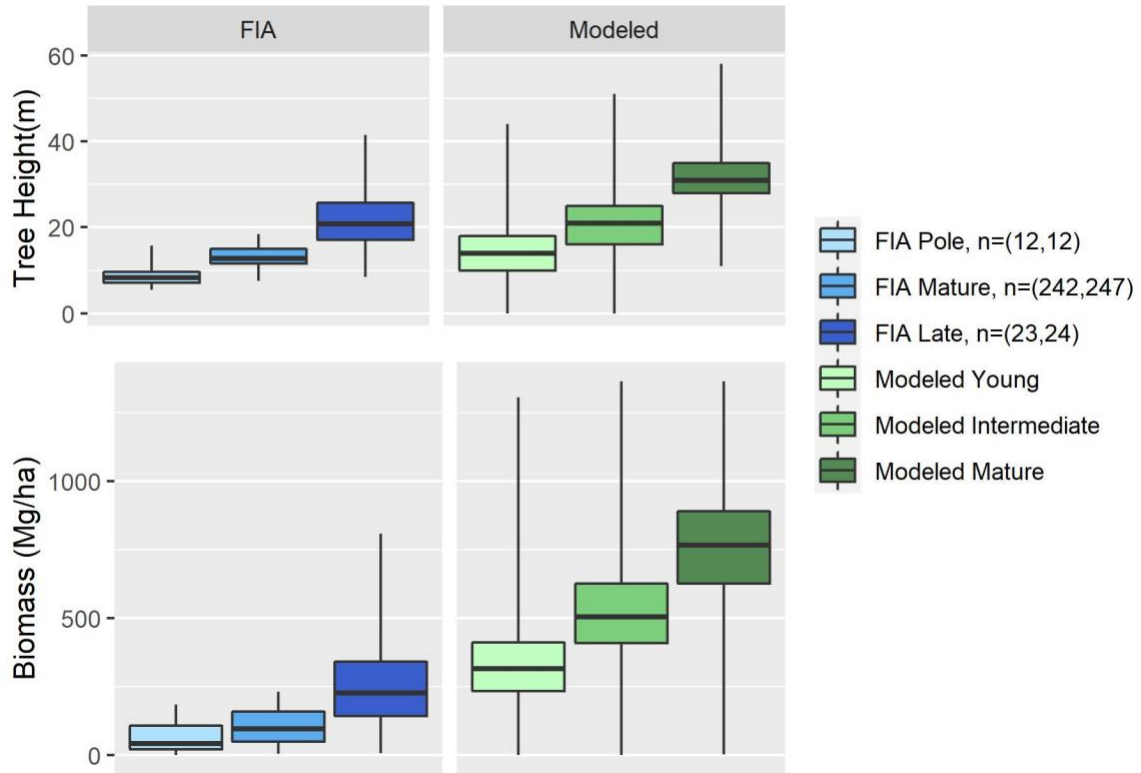


# Interior Plateau-Oak/Hickory Group

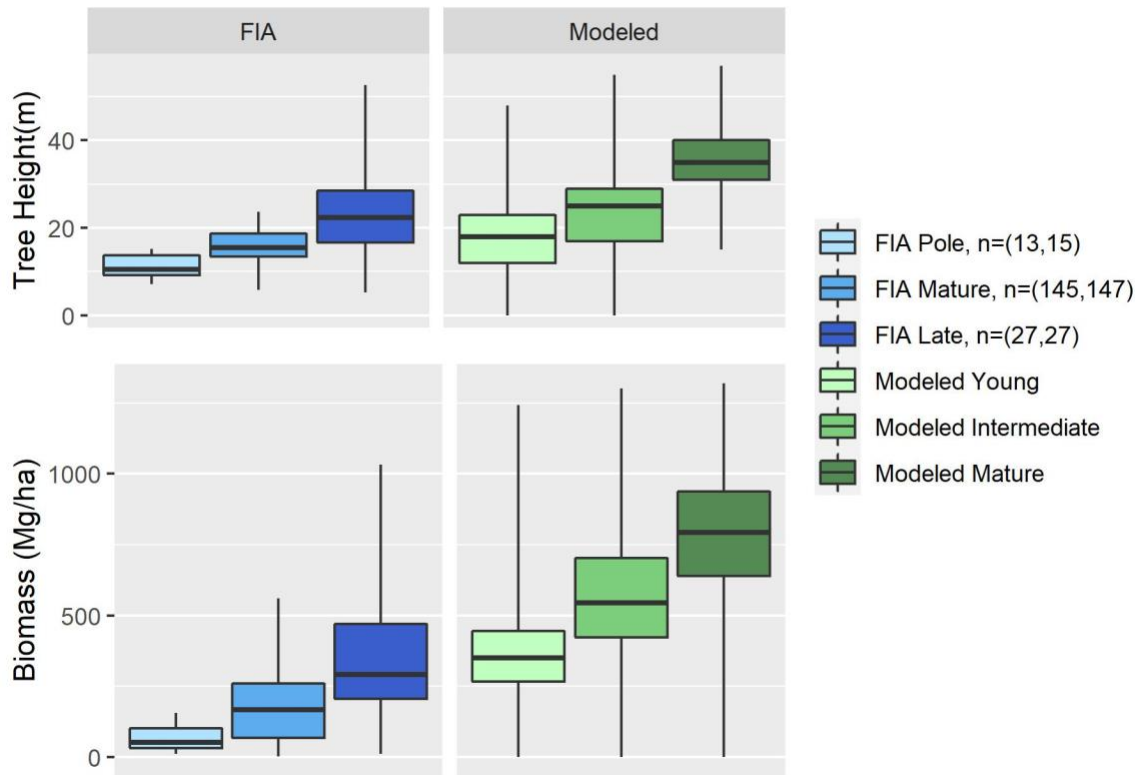
Forest area = 4,148,034ha



Klamath Mountains-California High North Coast Range-California Mi:  
Forest area = 2,011,120ha

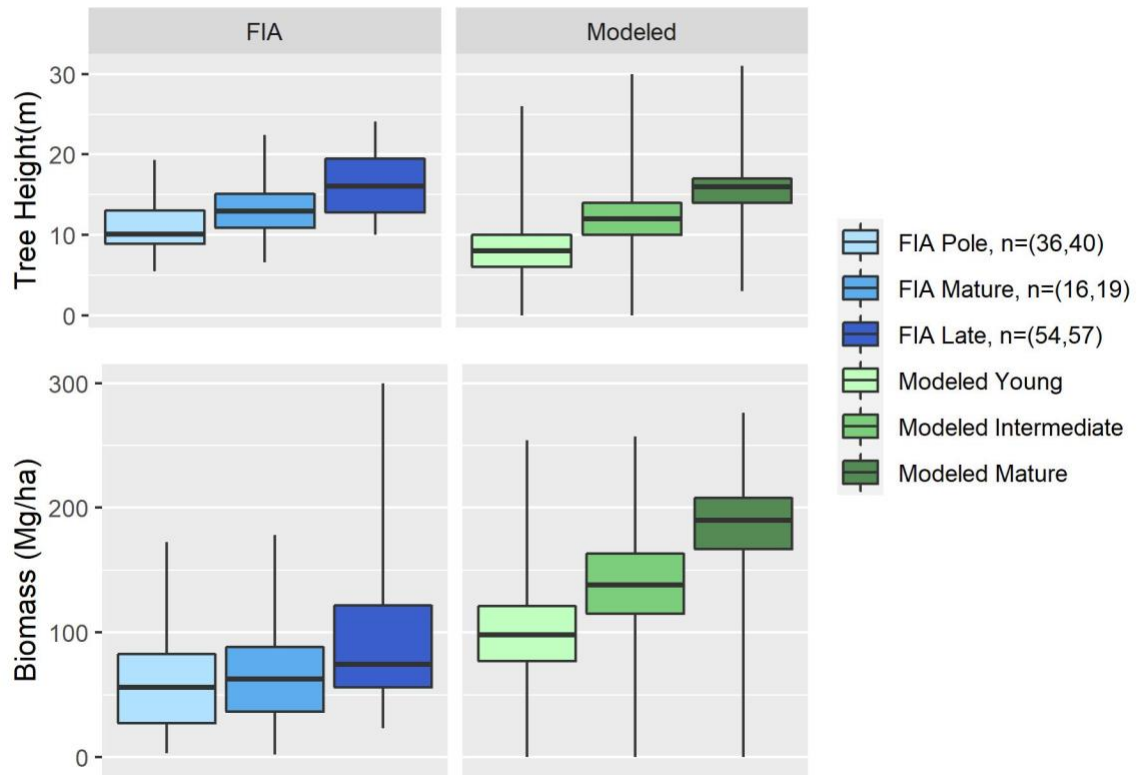


Klamath Mountains-California High North Coast Range-Douglas-fir C  
Forest area = 1,383,258ha



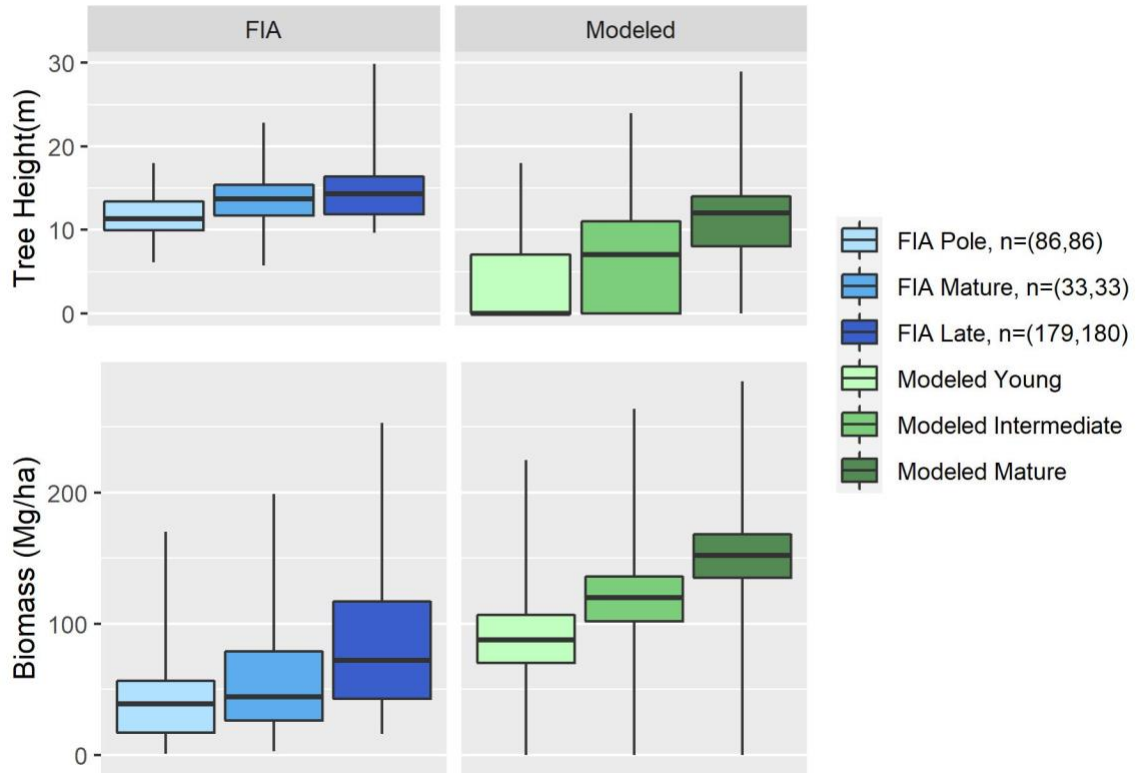
# Middle Rockies-Douglas-fir Group

Forest area = 2,534,528ha



# Middle Rockies-Ponderosa Pine Group

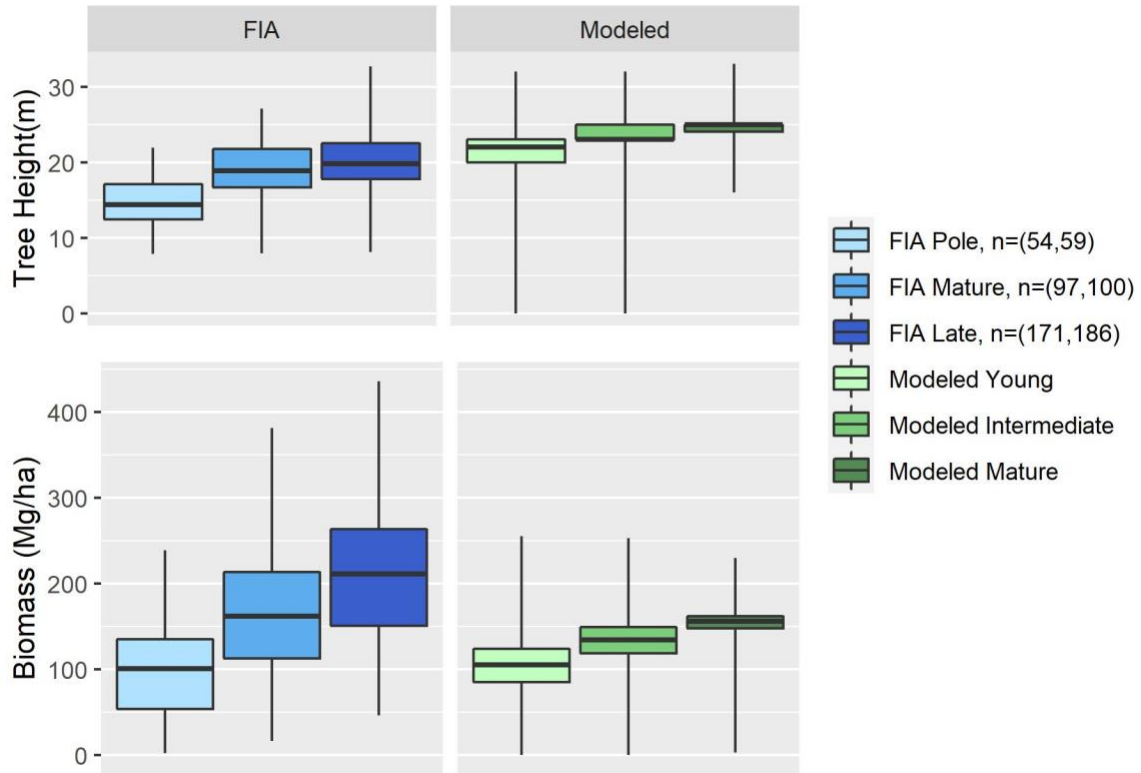
Forest area = 1,004,526ha





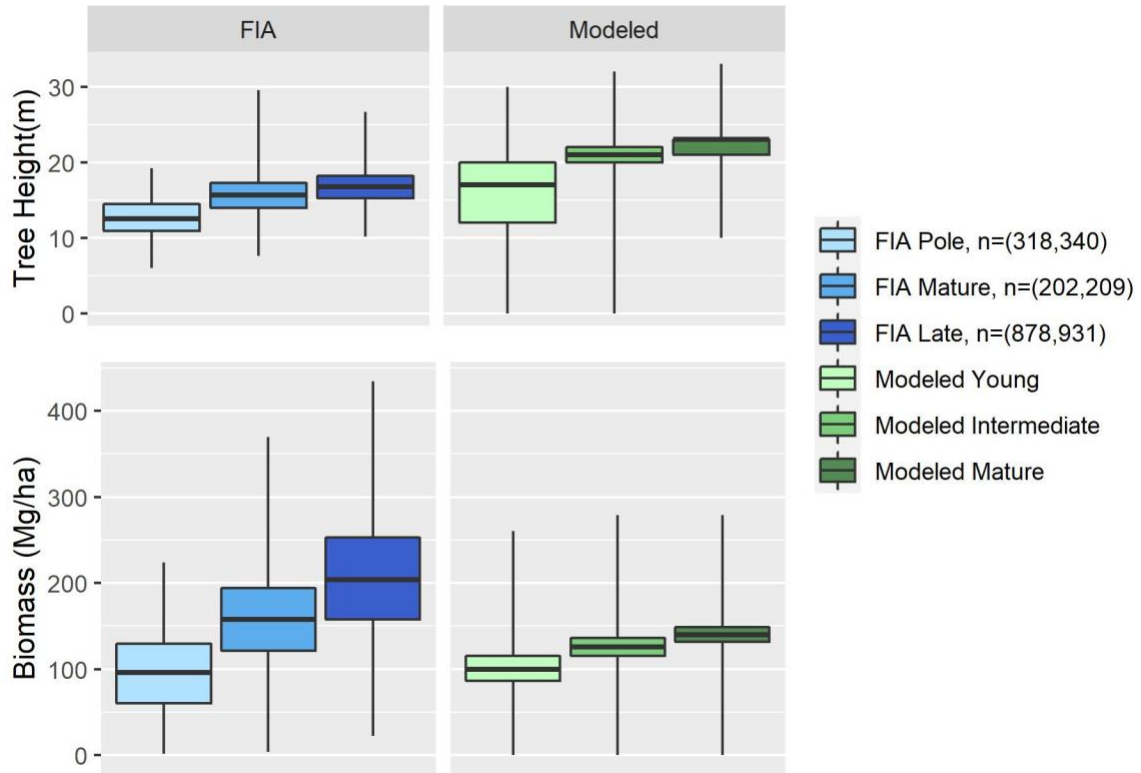
# North Central Appalachians-Maple/Beech/Birch Group

Forest area = 1,916,320ha



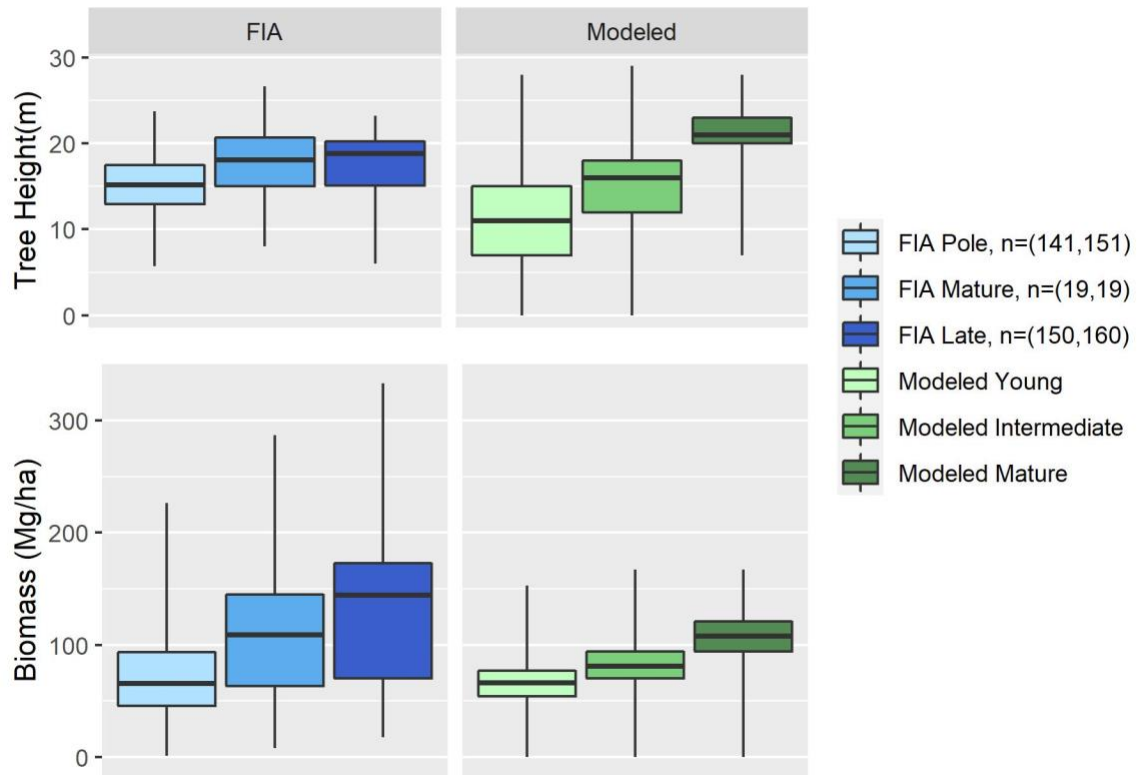
# Northeastern Highlands-Maple/Beech/Birch Group

Forest area = 10,262,450ha



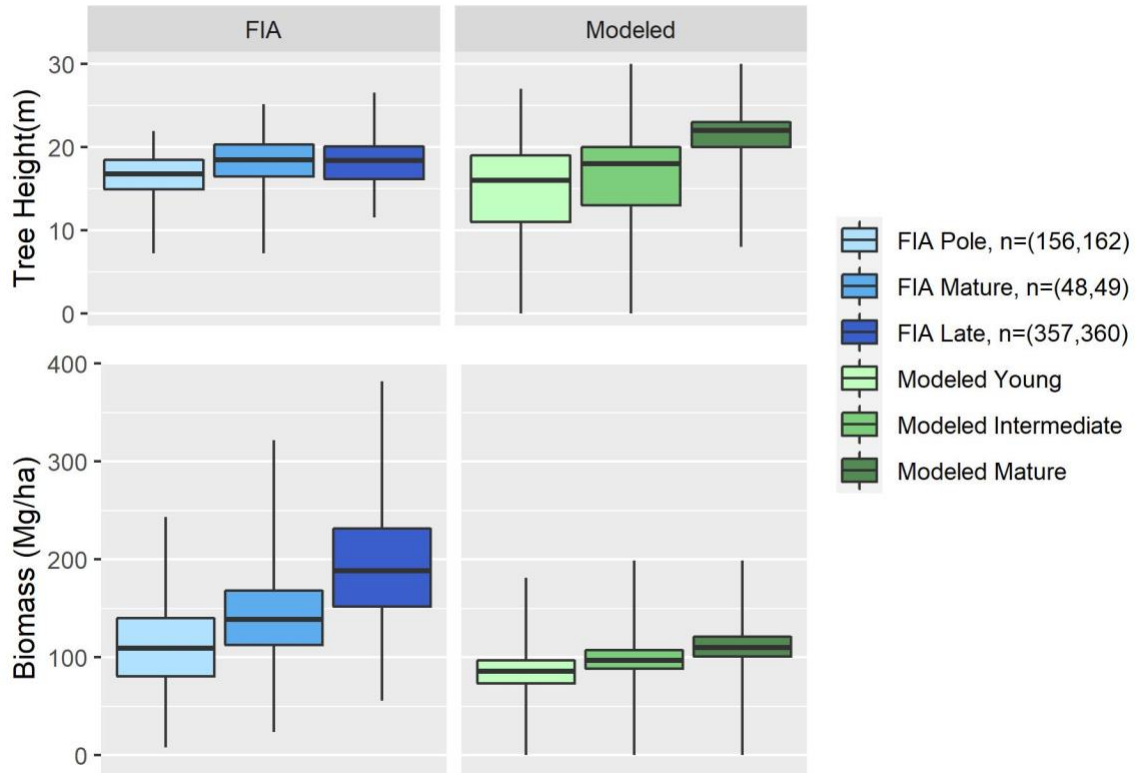
# Northern Lakes and Forests-Aspen/Birch Group

Forest area = 8,279,810ha



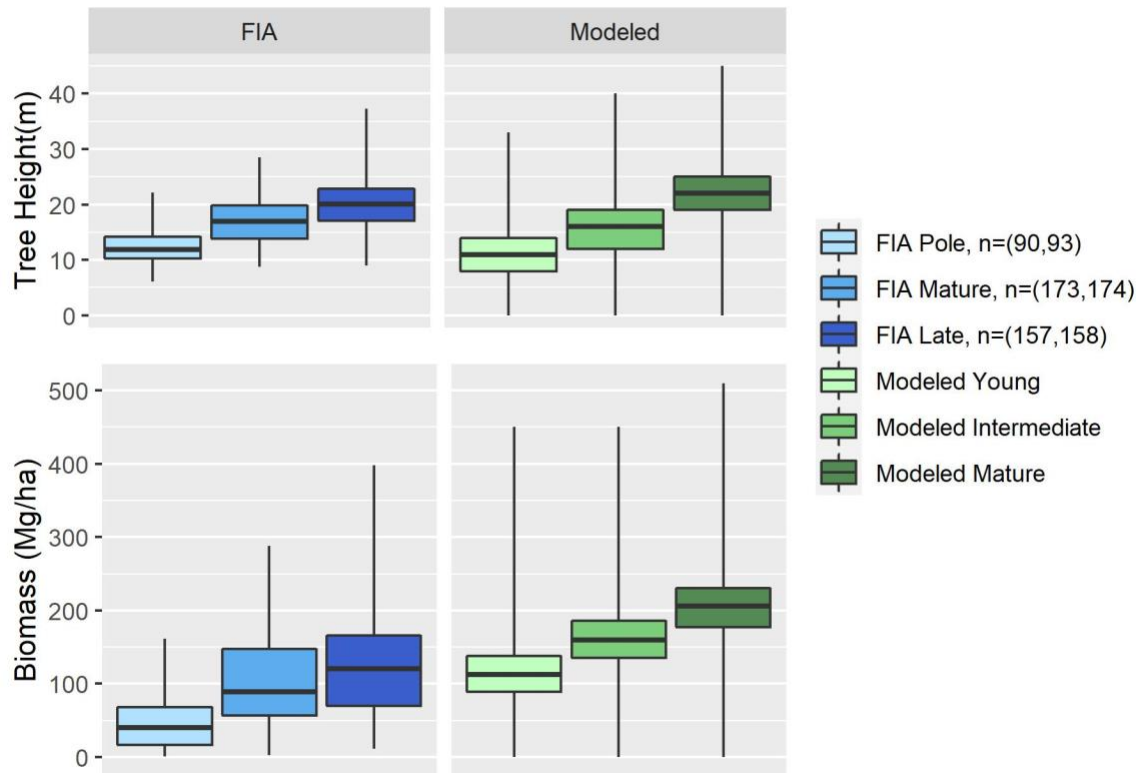
# Northern Lakes and Forests-Maple/Beech/Birch Group

Forest area = 4,269,443ha



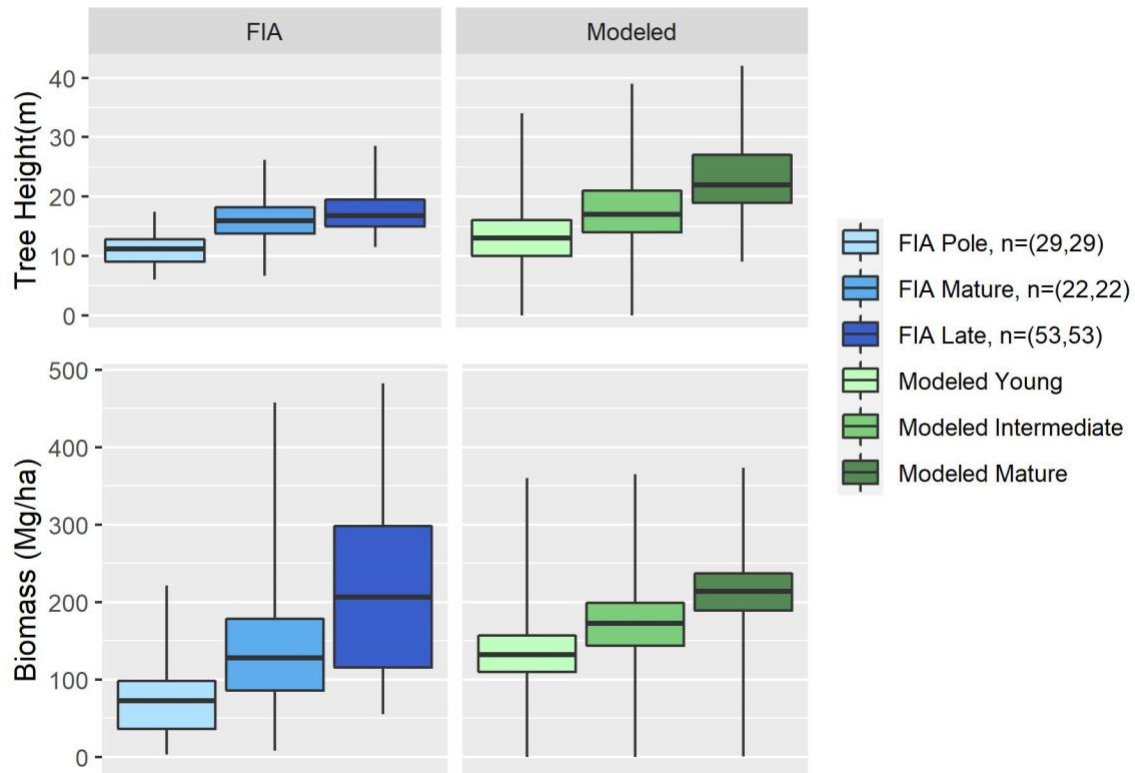
# Northern Rockies-Douglas-fir Group

Forest area = 4,717,516ha



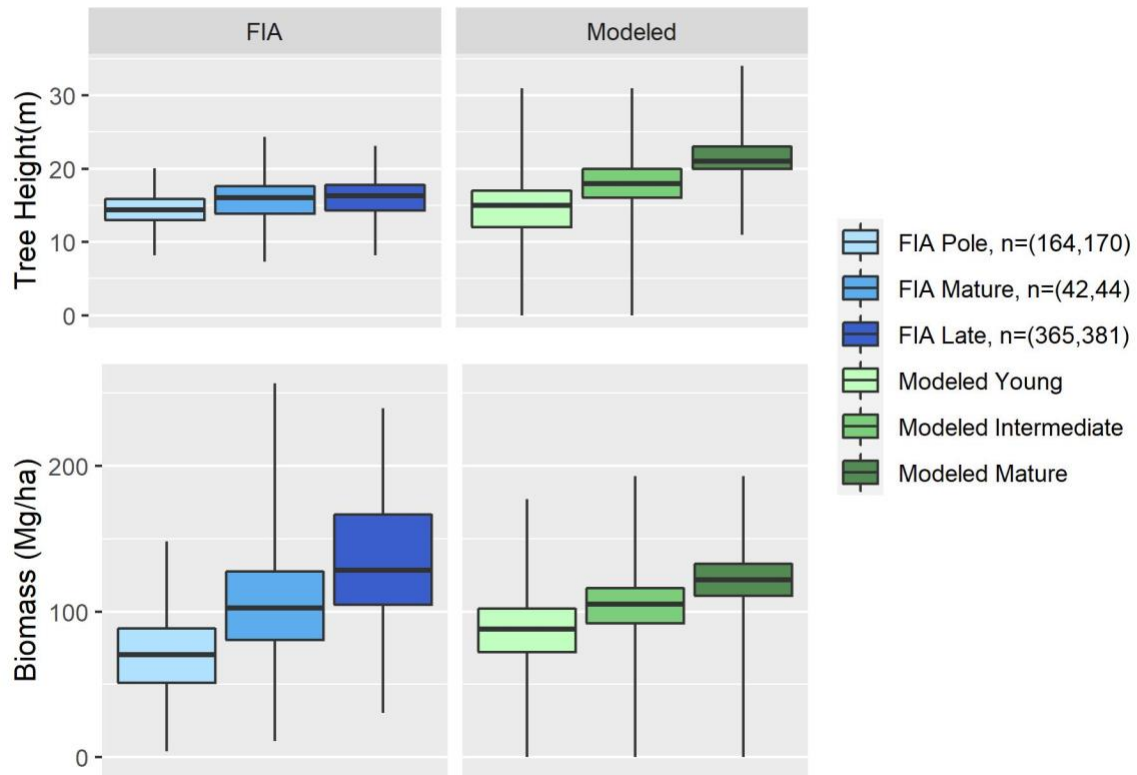
# Northern Rockies-Fir/Spruce/Mountain Hemlock Group

Forest area = 2,299,296ha



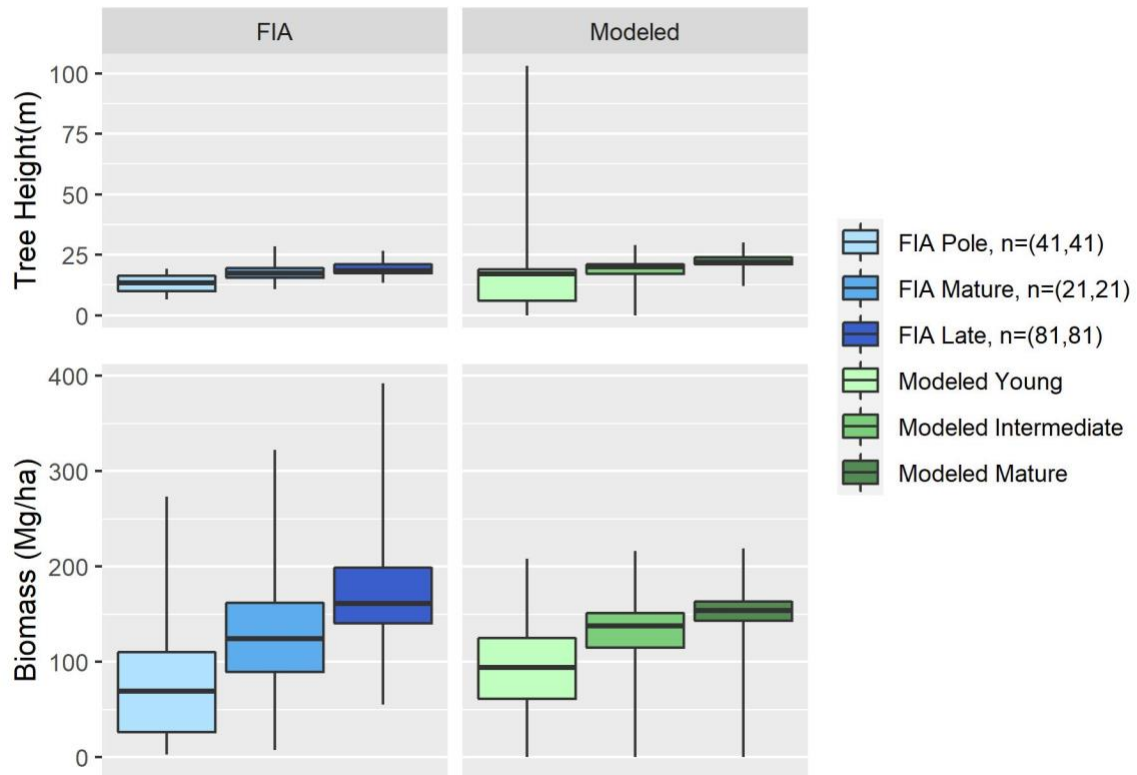
# Ozark Highlands-Oak/Hickory Group

Forest area = 5,253,192ha



# Piedmont-Loblolly/Shortleaf Pine Group

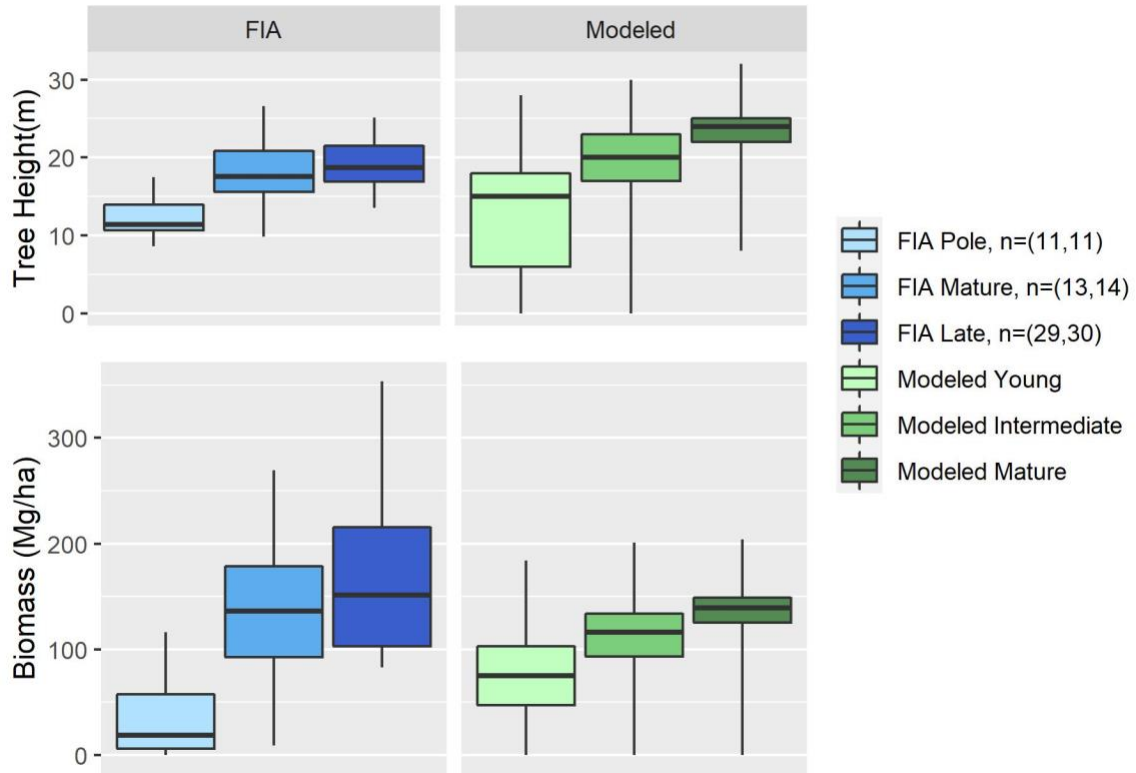
Forest area = 4,449,227ha





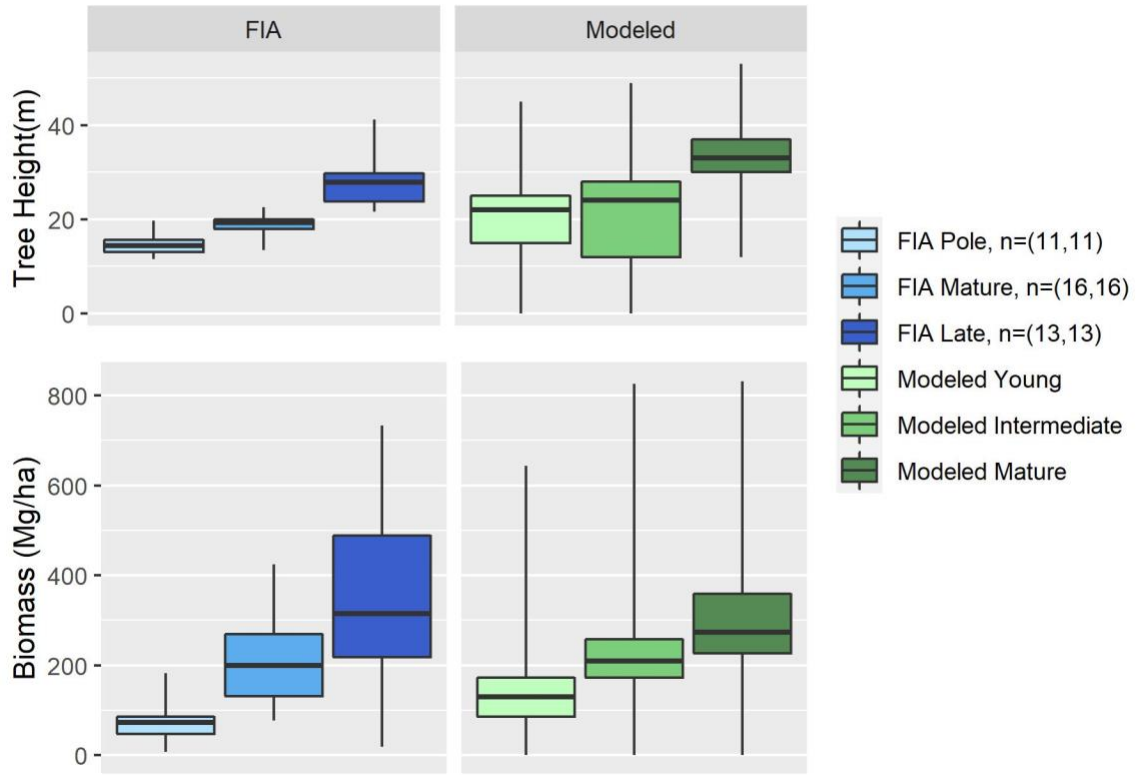
# Piedmont-Oak/Hickory Group

Forest area = 5,808,988ha



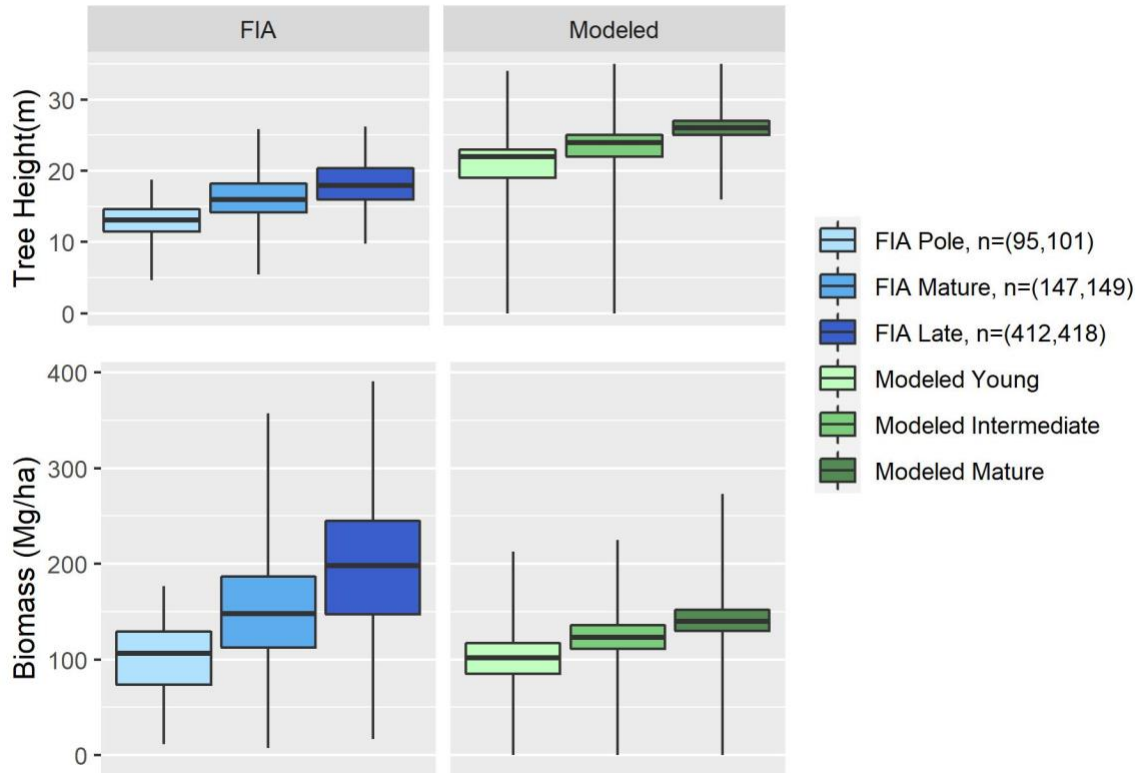
# Puget Lowland-Douglas-fir Group

Forest area = 760,598ha



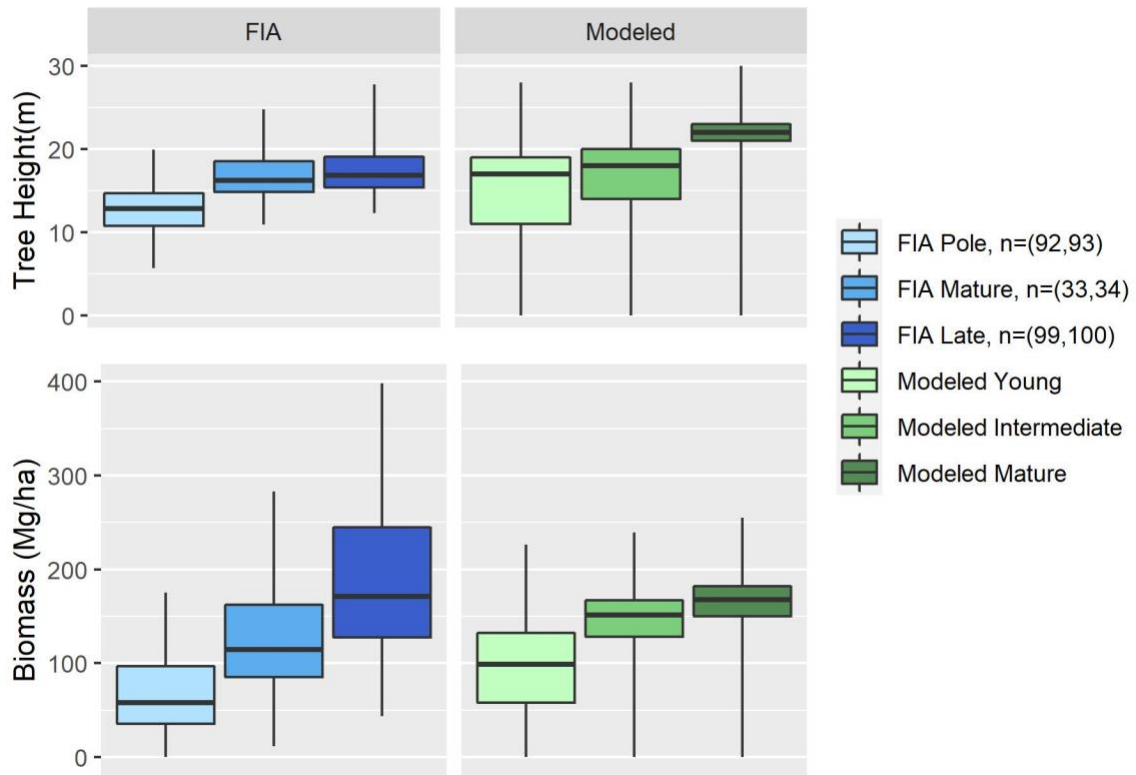
# Ridge and Valley-Oak/Hickory Group

Forest area = 5,624,025ha



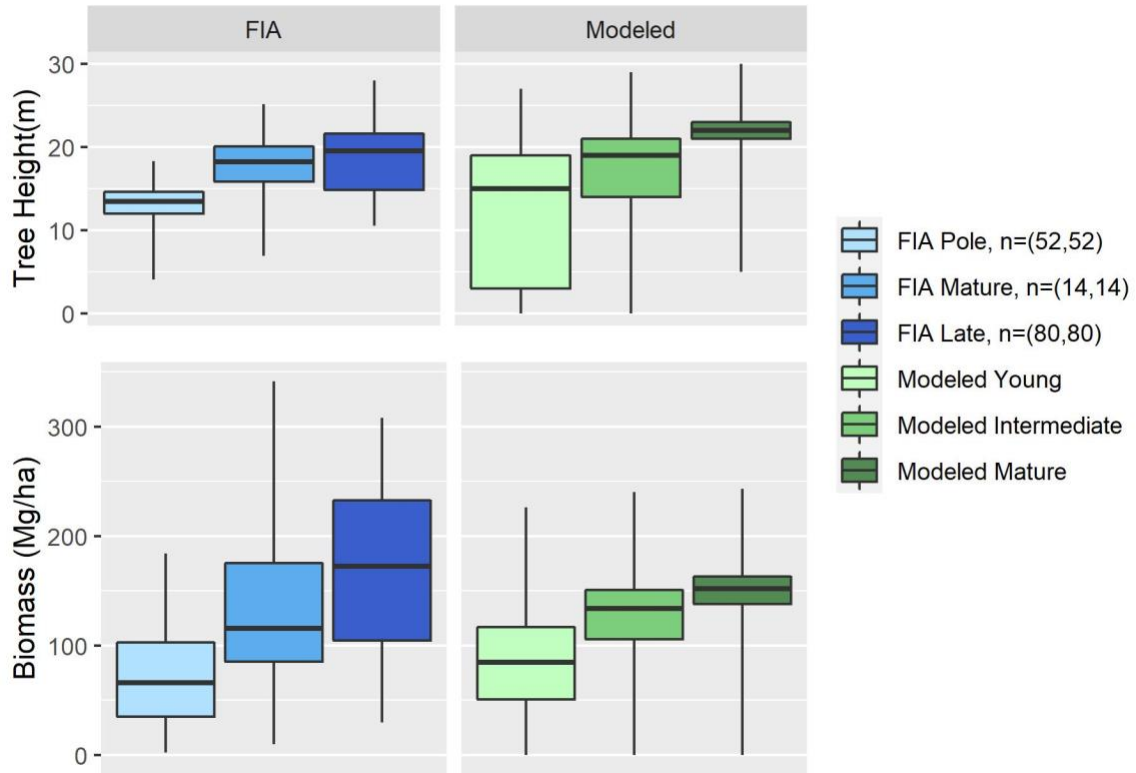
# South Central Plains-Loblolly/Shortleaf Pine Group

Forest area = 6,744,098ha



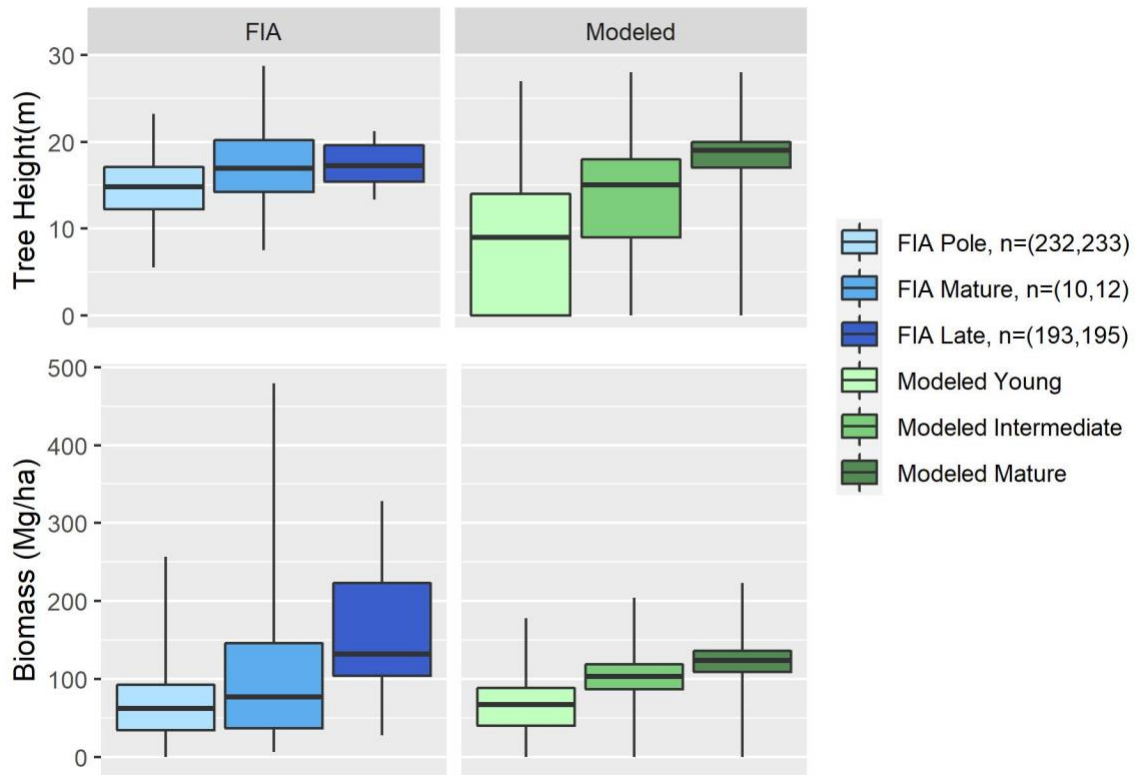
# Southeastern Plains-Loblolly/Shortleaf Pine Group

Forest area = 8,704,181ha



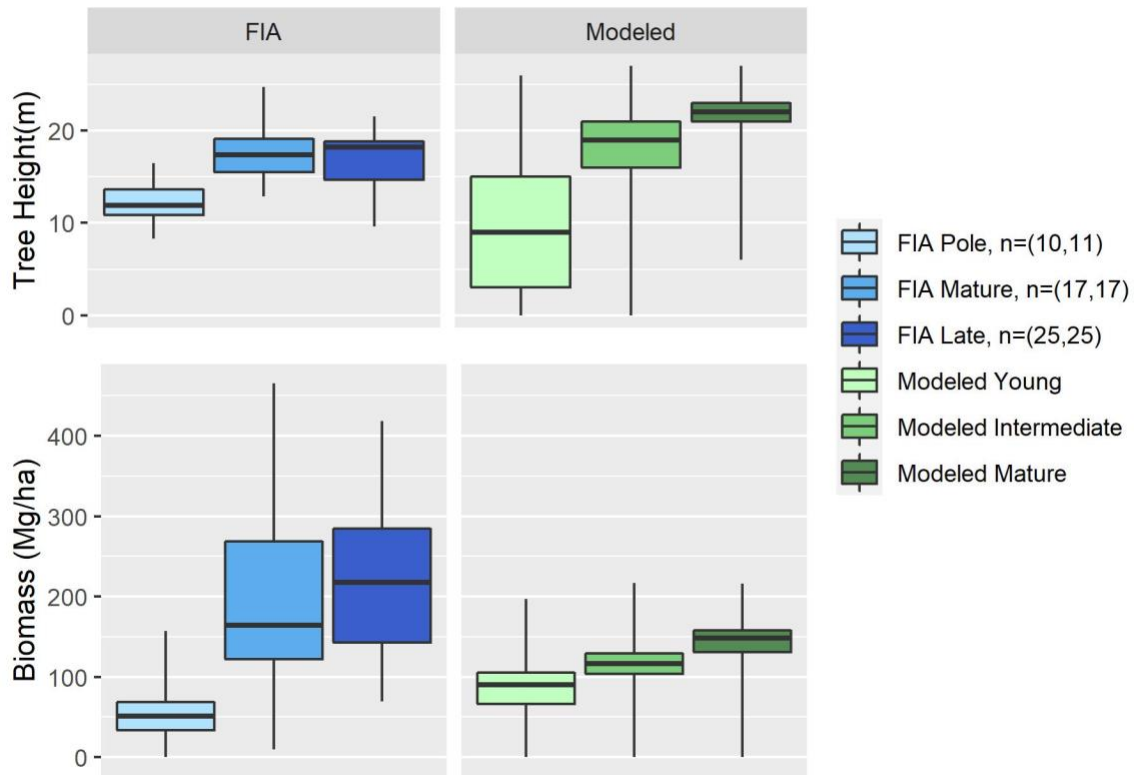
# Southern Coastal Plain-Longleaf/Slash Pine Group

Forest area = 3,813,097ha



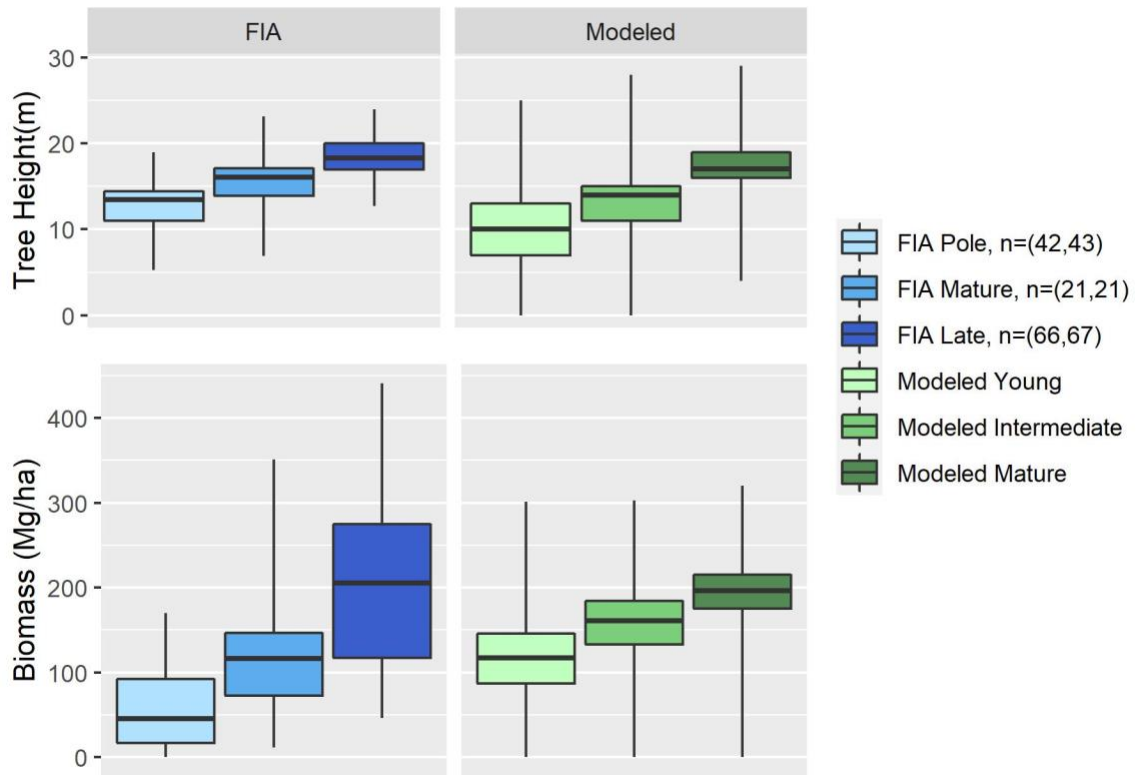
# Southern Coastal Plain-Oak/Gum/Cypress Group

Forest area = 1,621,097ha



# Southern Rockies-Fir/Spruce/Mountain Hemlock Group

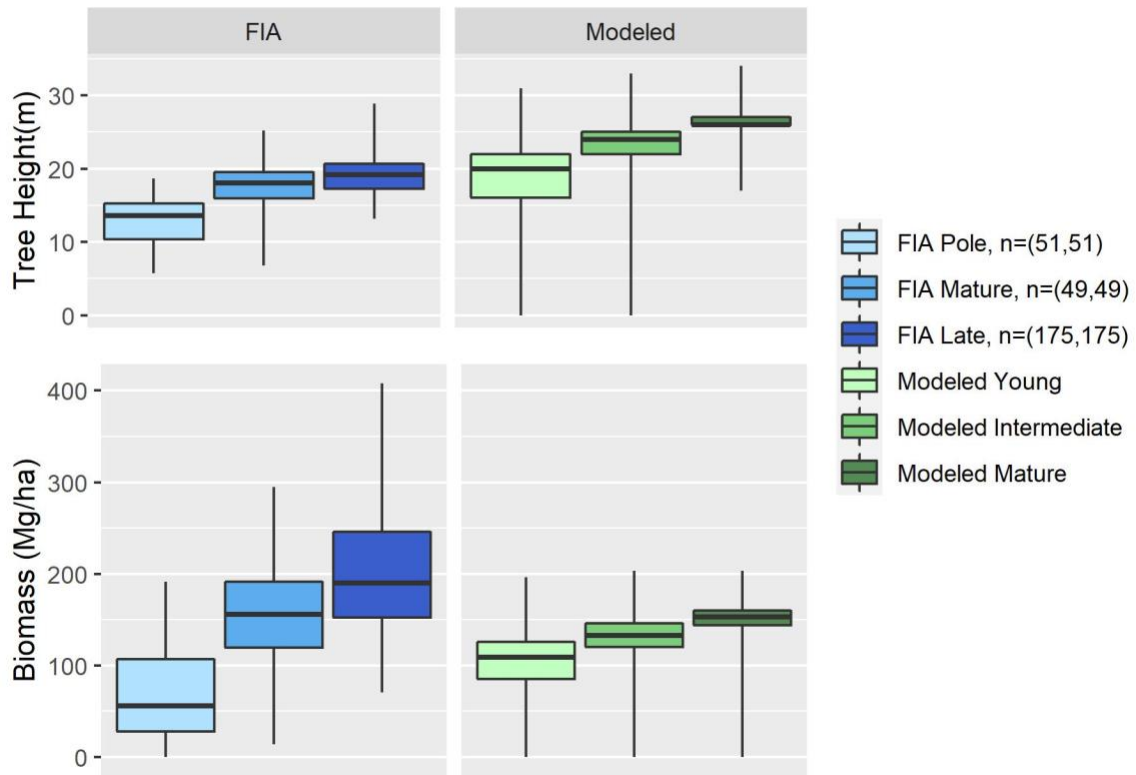
Forest area = 2,775,455ha





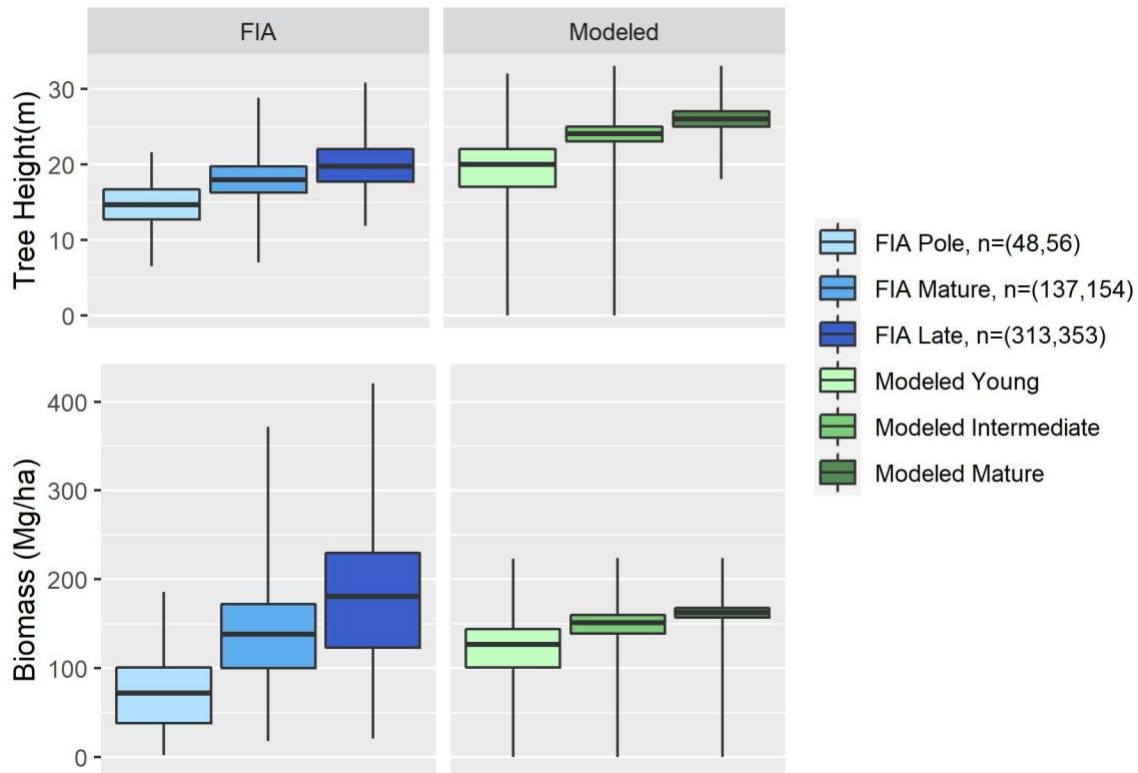
# Southwestern Appalachians-Oak/Hickory Group

Forest area = 2,283,734ha



## Western Allegheny Plateau-Oak/Hickory Group

Forest area = 4,867,250ha



**Fig. SI3** Comparison of characteristic canopy height and biomass from modelled forest maturity with estimates from FIA plot data. The spatial units of analysis (SUA) were the intersection of USA Ecoregions Level III with modelled geographic distributions of major forest groups. All SUA containing at least 10 FIA plots for each of the four FIA maturity levels are included in the figure. The SUA are labelled according to their major forest group name. Box plots defined by interquartile range (first quartile, median, third quartile) with whiskers being minimum and maximum based on the most recent values from all available FIA plots within each of the three stand structure categories (Pole, Mature, Late), for each SUA