

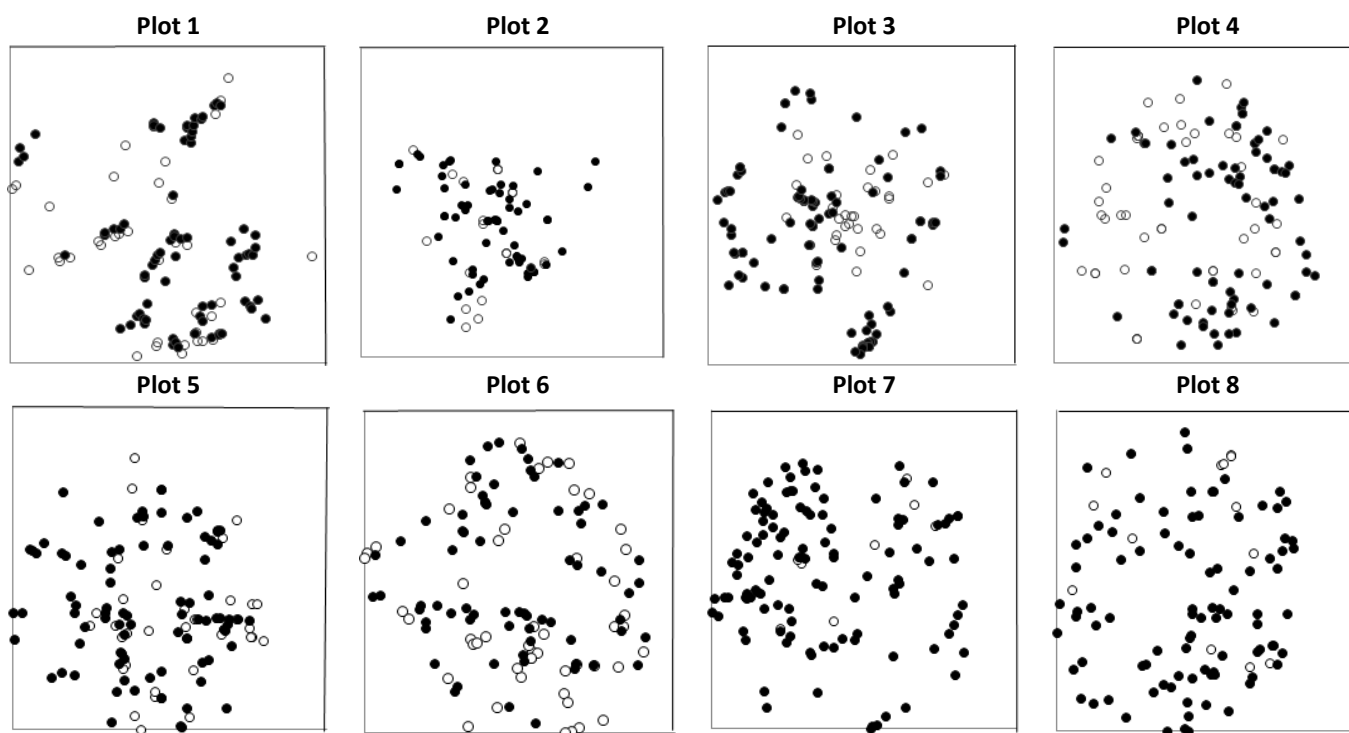


Figure S1. Spatial distribution of studied Moroccan fir stands. Black circles are *Abies marocana* and white circles represent other woody species (see Table 1). Plots 1, 5-8 had a radius of 20 m and plots 2-4 of 15 m.

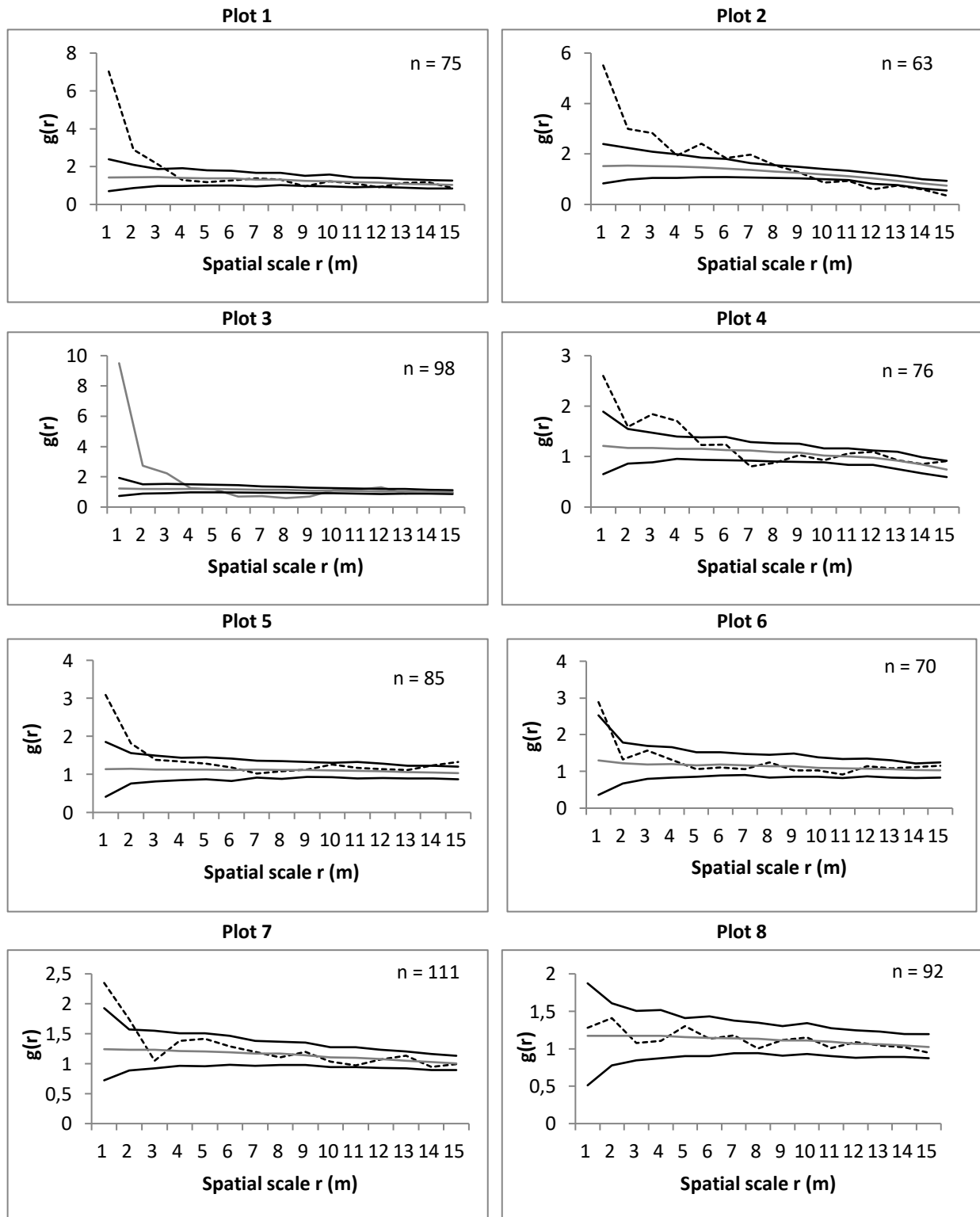


Figure S2. Univariate pair correlation function $g(r)$ of the overall *Abies marocana*. Dotted line indicates the empirical curve, gray line indicates the expected value under the Heterogeneous Poisson null model and black lines indicate limits of 199 Monte Carlo simulation envelopes. The number of individual analyzed (n) is shown within each panel.

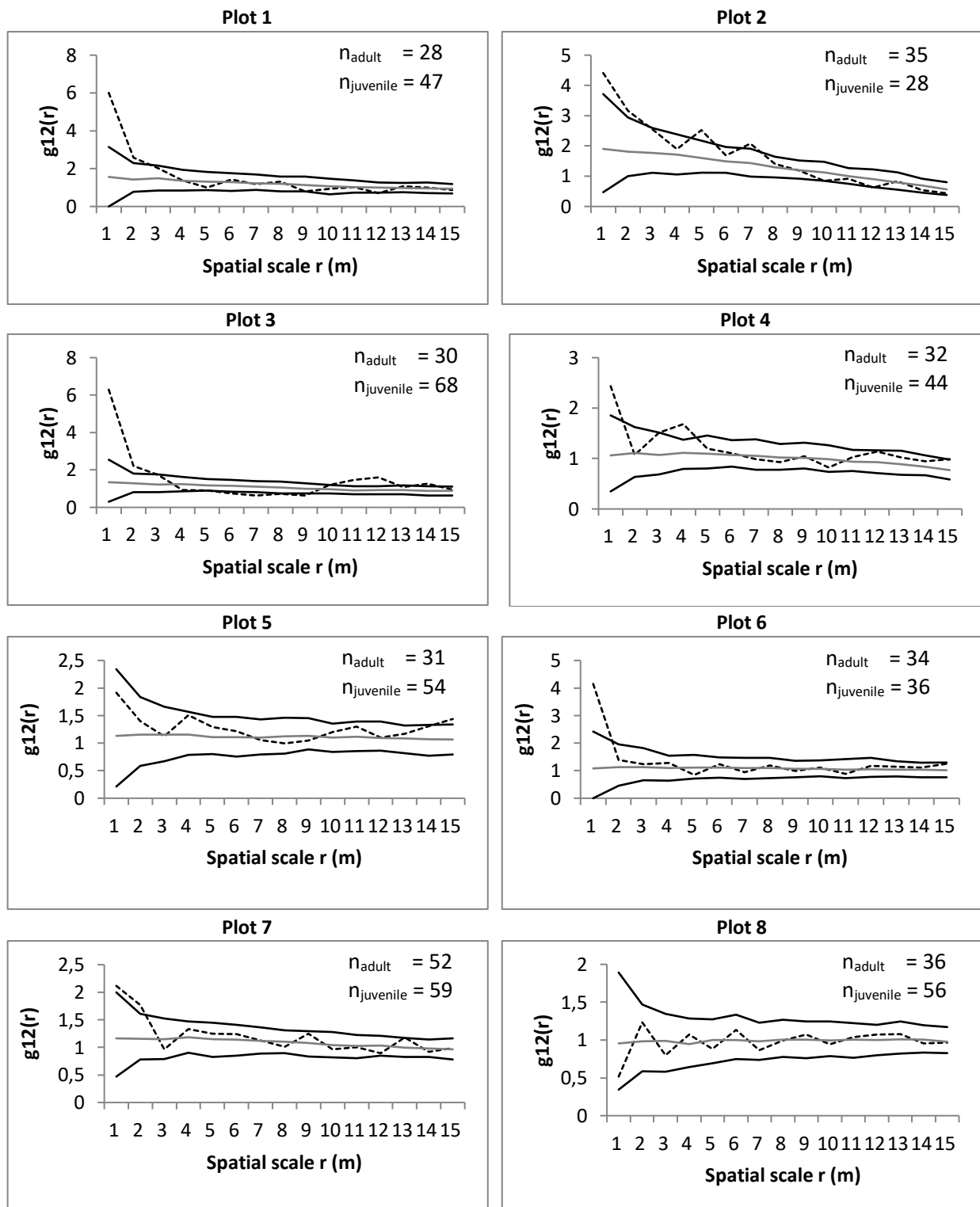


Figure S3. Bivariate pair correlation function $g_{12}(r)$ of two fir size classes: juveniles with dbh ≤ 10 cm (pattern 2) and adult trees with dbh > 10 cm (pattern 1). Dotted line indicates the empirical curve, gray line indicates the expected value under the antecedent condition null model and black lines indicate limits of 199 Monte Carlo simulation envelopes. The number of individual analyzed (n) in each size class is shown within each panel.

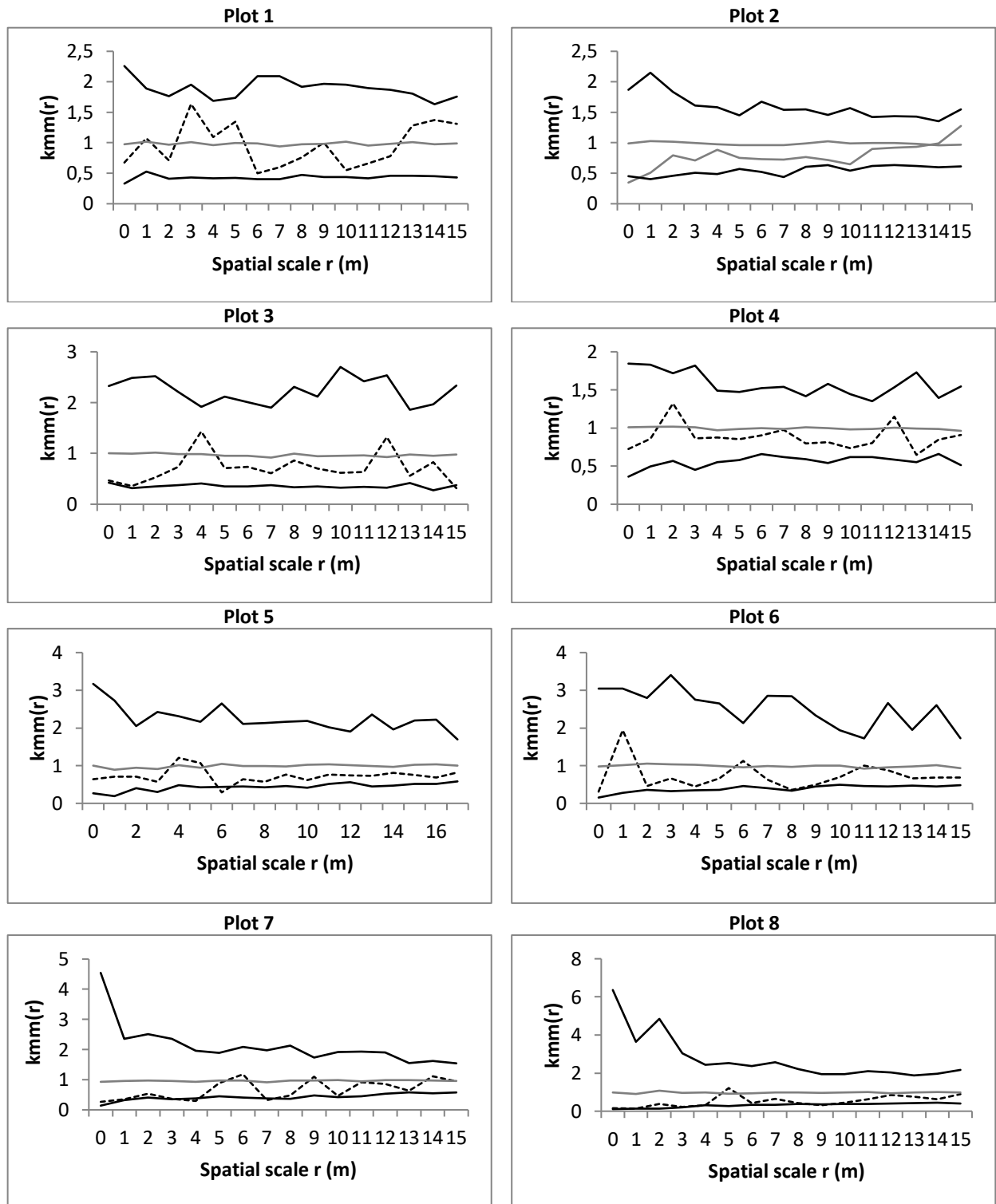
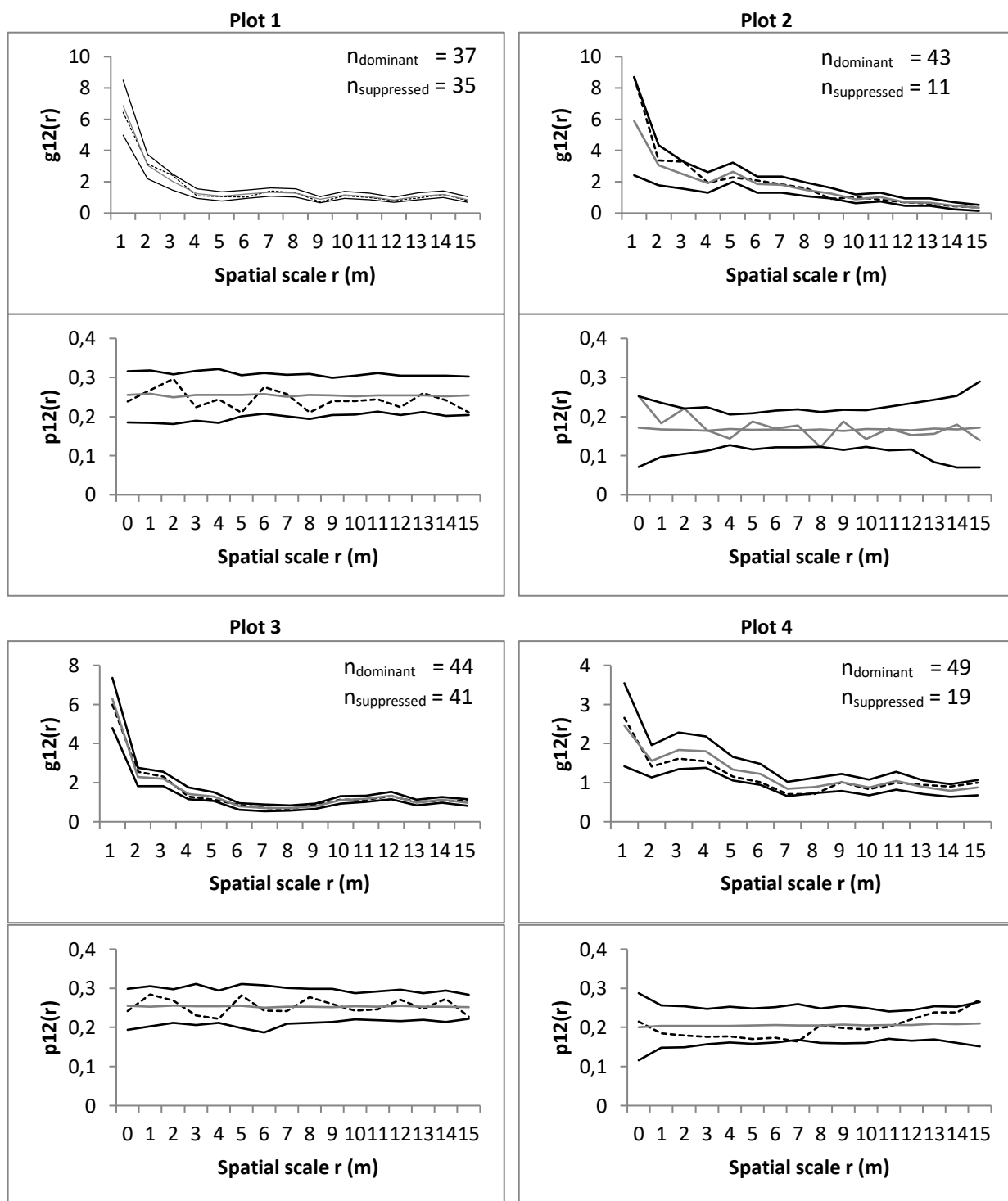


Figure S4. Univariate mark-correlation function $k_{mm}(r)$ of *Abies marocana* tree size (dbh). Dotted line indicates the empirical curve, gray line indicates the expected value under the independent marking and black lines indicate limits of 199 Monte Carlo simulation envelopes.



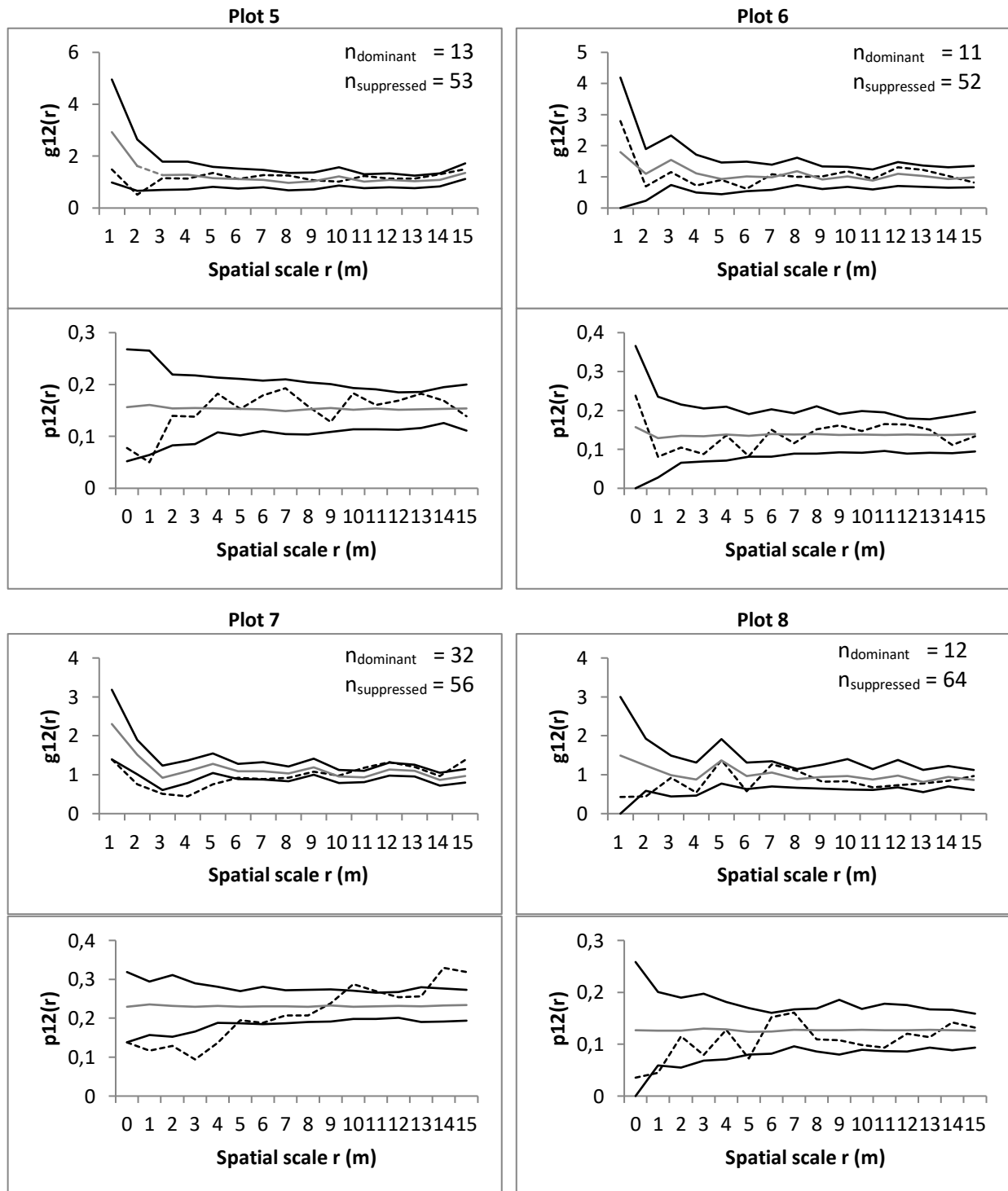


Figure S5. Random labelling analysis of firs (good condition vs suppressed trees) using partial-pair correlation functions $g_{12}(r)$ and mark connection function $p_{12}(r)$. Dotted line indicates the empirical curve, gray line indicates the expected value under the random labeling null model and black lines indicate limits of 199 Monte Carlo simulation envelopes. The number of both good condition and suppressed trees is shown within each panel.