Supplementary Materials for:

2 Spatial variation in canopy structure across forest

3 landscapes

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- Overview: This supplement provides additional figures illustrating patterns in landscape-scale variation of canopy structure for several of the sites in this study. Fig. S1 illustrates a tendency for the value of each CS metric to converge toward a similar value across all sites with a sufficiently long transect. Figs. S2-S5 show running means of CS metrics calculated using an averaging window varying in size from 10-150 m; large, sudden shifts in the value of a CS metric that persists across a range of averaging window sizes are hypothesized to indicate the presence of ecotones and/or edaphic gradients to which CS metrics are
- 22 sensitive.

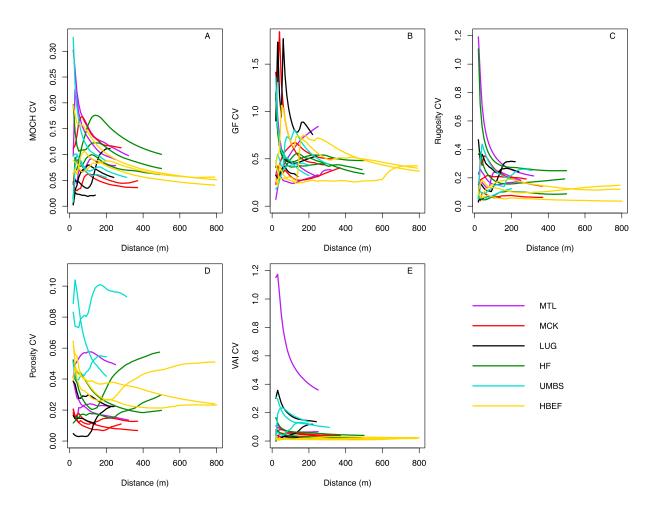


Figure S1. Coefficient of variation of canopy structural complexity metrics from *N*=3 individual transects at each of six forested landscapes in Eastern North America. CS metrics included A) mean outer canopy height (MOCH), B) percentage of deep gap fractions (GF), C) canopy rugosity, D) porosity, and E) mean vegetation area index (VAI).

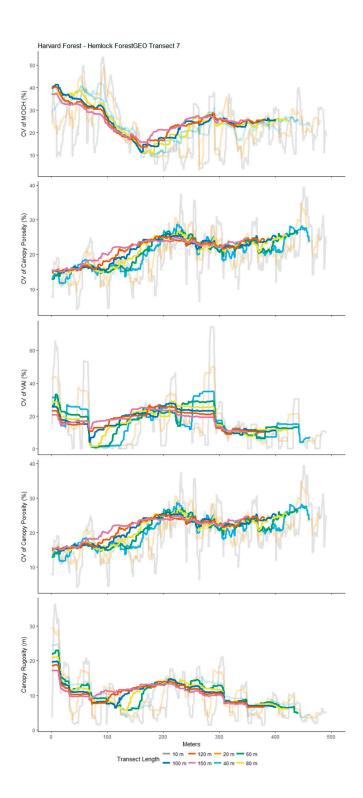


Figure S2. Running means of CS metrics at Harvard Forest. Mean Outer Canopy Height (MOCH), Canopy Porosity, Vegetation Area Index (VAI), Gap Fraction, and Canopy Rugosity were calculated using 10, 20, 40, 60, 80, 100, 120, and 150 m subsegments of the full transects Shading and alpha levels are included to highlight more consistent calculation distances.

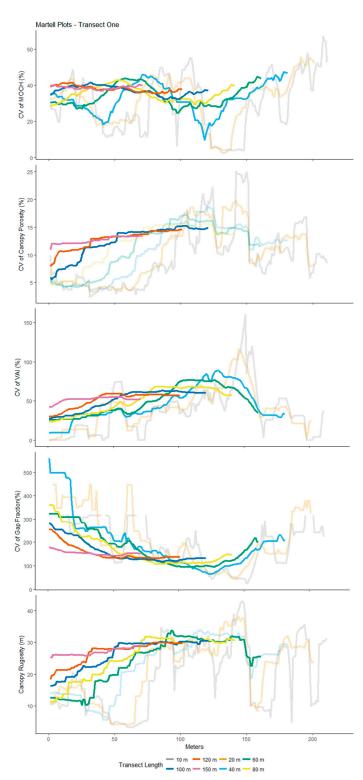


Figure S3. Running means of CS metrics at Martell Forest. Mean Outer Canopy Height (MOCH), Canopy Porosity, Vegetation Area Index (VAI), Gap Fraction, and Canopy Rugosity were calculated using 10, 20, 40, 60, 80, 100, 120, and 150 m subsegments of the full transects Shading and alpha levels are included to highlight more consistent calculation distances.

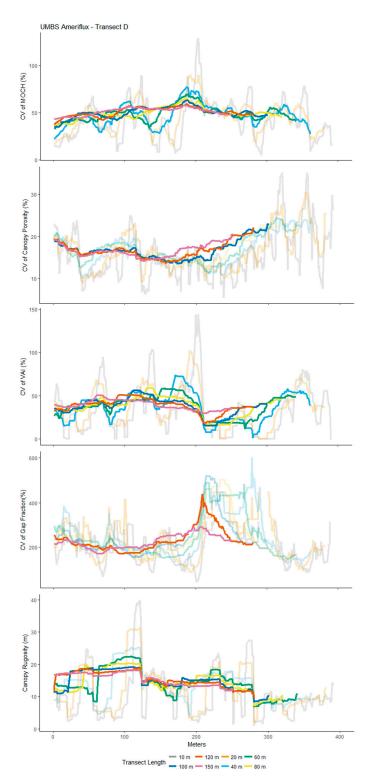


Figure S4. Running means of CS metrics at University of Michigan Biological Station (UMBS). Mean Outer Canopy Height (MOCH), Canopy Porosity, Vegetation Area Index (VAI), Gap Fraction, and Canopy Rugosity were calculated using 10, 20, 40, 60, 80, 100, 120, and 150 m subsegments of the full transects Shading and alpha levels are included to highlight more consistent calculation distances.

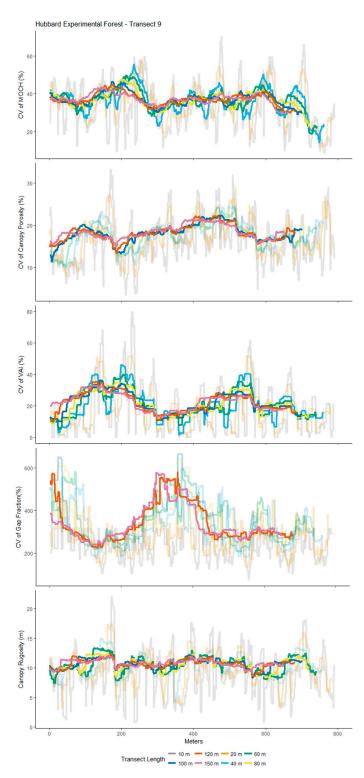


Figure S5. Running means of CS metrics at Hubbard Brook Experimental Forest. Mean Outer Canopy Height (MOCH), Canopy Porosity, Vegetation Area Index (VAI), Gap Fraction, and Canopy Rugosity were calculated using 10, 20, 40, 60, 80, 100, 120, and 150 m subsegments of the full transects Shading and alpha levels are included to highlight more consistent calculation distances.