Dear Editor:

We submit our manuscript " Thermal sensitivity across forest vertical profiles: patterns, mechanisms, and ecological implications" by Nidhi Vinod and coauthors for consideration for publication in New Phytologist as an invited Tansley review (invitation received September 15, 2020).

As the climate changes, rising temperatures are influencing forests on many scales. This is likely to differentially affect trees of different size across the forest strata, yet we lack a synthetic understanding of how. Using published research and new analyses, we evaluate how microclimate and leaf temperatures, traits, and gas exchange vary vertically in forests, shaping tree ecology and ecosystem function. We further consider the implications for forest dynamics under a changing climate, along with implications for modeling and scaling our understanding to characterize forest-climate feedbacks. We believe that this manuscript will be of interest to a wide audience of forest ecologists, physiologists, ecosystem ecologists, and modelers.

Thank you for considering our submission for New Phytologist.

Sincerely,

Nidhi Vinod and Kristina Anderson-Teixeira, on behalf of all co-authors.