

General assessment:

This study provides a valuable perspective on how to evaluate diversity in ecosystem functional patterns through the classification of Ecosystem Functional Types (EFTs). EFTs are surface-based classifications derived from key functional attributes of ecosystems, and here they are compared against more conventional classifications that emphasize composition and structure, such as Plant Functional Types (PFTs). The comparison is grounded on in situ measurements obtained with the eddy covariance technique, one of the most robust and reliable approaches for quantifying ecosystem-level functional processes. The analysis further benefits from the use of the highly reputable FLUXNET2015 database.

The methodological design is rigorous, offering a well-balanced comparison between EFTs and PFTs prior to subjecting them to discriminant analysis. Although results did not reveal statistically significant differences, the study successfully validates the effectiveness of EFTs in representing functional patterns at the ecosystem scale. A key advantage is that EFTs provide more dynamic insights than classifications based solely on compositional or structural traits.

The authors also acknowledge the limitations of EFTs, particularly regarding spatial resolution and the fact that not all EFT classes were represented in the study area. These issues are appropriately addressed in Section 4.3. Furthermore, the manuscript is well-written, demonstrating good coherence, cohesion, and flow.

Concluding remarks:

This work makes an important contribution to the representation of spatial functional patterns and their comparison against more conventional classification systems, validated with in situ flux measurements. The choice of the study domain is appropriate given the high density of flux tower sites. However, due to the diversity of EFTs, not all classes were represented by field observations. Nevertheless, more than 70% of the spatial coverage of EFTs was captured within the study area. Overall, I consider this manuscript to be in a publishable form as it stands.