

Interactive comment on “Global ecosystem-scale plant hydraulic traits retrieved using model-data fusion” by Yanlan Liu et al.

Anonymous Referee #1

Received and published: 12 January 2021

The study introduces the concept of hydraulic functional types, which represent distinct combinations of plant hydraulic traits and which may contribute to an improved parameterization of vegetation in land surface models. It is further evaluated if hydraulic functional types can present an alternative to commonly used plant functional types.

The study thus presents indeed new insight into the spatial distribution of certain trait combinations that might be relevant for further applications in global vegetation analysis. The manuscript fits well into the scope of the journal and might attract readers interested in vegetation modeling.

The manuscript is well structured and the methods are described appropriately. I only have minor comments.

C1

Minor comments:

- Define which correlation coefficient was used - assuming it was the Pearson correlation coefficient?
- Information about the PFT-names should be included in the main part when PFTs are first mentioned.
- Add a conclusion section referring to the main results.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-649>, 2020.

C2