Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2018-631-RC1, 2019 © Author(s) 2019. This work is distributed under the Creative Commons Attribution 4.0 License.



Interactive comment on "Unexplained hydrogen isotope offsets complicate the identification and quantification of tree water sources in a riparian forest" by Adrià Barbeta et al.

Song (Referee)

songxbnu@gmail.com

Received and published: 1 February 2019

In this manuscript, Barbeta et al. presents a field-based water isotope dataset that was collected for the purpose of investigating potential water sources of two broad-leaved tree species in a temperate, riparian forest. One of the main findings of their study was that hydrogen isotope ratios in the xylem water of the two studied tree species were generally more depleted than those of soil water at different depths and other potential water sources. This suggests potential fractionation effects associated with hydrogen isotopes at the soil-root interface and/or within plant tissues. This is the second time I am reviewing this paper. The authors have made great efforts addressing the concerns

C1

that were raised in my previous reveiw report, which I appreciate. I think the ms in its current form is strong and I would thus recommend it for publication in HESS.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2018-631, 2019.