

Interactive comment on “The influence of riparian evapotranspiration on stream hydrology and nitrogen retention in a subhumid Mediterranean catchment” by Anna Lupon et al.

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Dear reviewers and Prof. Cristian Stamm (Editor of HESS),

Many thanks for your thoughtful review comments on the paper "The influence of riparian evapotranspiration on stream hydrology and nitrogen retention in a subhumid Mediterranean catchment" we submitted for publication to HESS. We feel thankful for your positive and constructive comments such as that "this paper is straightforward and convincing" or that "the authors did a commendable job". Moreover, we think that your comments and edits on the paper have been of great help to improve the quality and clarity of it.

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We have taken into consideration all the comments highlighted by you and we are working thoroughly on a new version of the manuscript to tackle most of them. According to your comments, in the new version of the manuscript, we will explain in more detail sap-flux measurements, chemical data analysis and both riparian and stream characteristics. Moreover, we will clarify the interpretation of diurnal signals of stream discharge during the dormant period. Following your advice, we will also provide some explanation for the low evapotranspiration rates, and temperature will be included as a potential driver of in-stream nitrification. We will also tone down our conclusions regarding the effect of riparian evapotranspiration on stream nitrogen loads at annual scale. Finally, we will add the graphs requested by you as supplementary materials.

In the attached file, we provide the answer to each of your comments. In case of not following completely your suggestions, we have stated why. Please, do not hesitate to contact us if you considered that further clarifications are needed.

Looking forward hearing from you soon,

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cc: Susana Bernal, Sílvia Poblador, Eugènia Martí, Francesc Sabater

Please also note the supplement to this comment:

<http://www.hydrol-earth-syst-sci-discuss.net/hess-2016-56/hess-2016-56-AC1-supplement.pdf>

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