Hydrol. Earth Syst. Sci. Discuss.,
https://doi.org/10.5194/hess-2019-503-SC1, 2019

Hydrology and Earth System Sciences
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Interactive comment on "Hydrograph separation: an impartial parametrization for an imperfect method" *by* Antoine Pelletier and Vazken Andréassian

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Received and published: 17 October 2019

A quick question: a root transformed hydrograph

To my pleasantly surprise, the linear reservoir (Page 7, Line 1) is not the focus of the analysis, but the quadratic reservoir (Page 7, Line 2) is.

For Petit Thérain river (Figure 7), can the authors please share with us the annual hydrographs with the total measured streamflow $Q(t)$ and the computed baseflow $R(t)$

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replotted in a negative reciprocal of the root (-RoR) or negative inverse square root (NISR) scale, $-1/\sqrt{Q}$?

For a quadratic reservoir or storage, the NISR transform linearizes the recession limbs for regression analysis, and displays as well the transformed data in a visually consistent frame for comparison with the logarithmic transform (See Santos et al., 2018, and therein SC2, SC5).

References

Santos, L., Thirel, G., and Perrin, C.: Technical note: Pitfalls in using log-transformed flows within the KGE criterion, Hydrol. Earth Syst. Sci., 22, 4583-4591, https://doi.org/10.5194/hess-22-4583-2018, 2018.

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