

# ***Interactive comment on “Using NDII pattern for a semi-distributed rainfall-runoff model in tropical nested catchments” by Nutchanart Sriwongsitanon et al.***

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Dear Nutchanart Sriwongsitanon et al.,  
thanks for your interesting work.

During my PhD and post-doc, I took some ideas from your first work on the use of NDII (Sriwongsitanon et al., 2016).

We obtained some good results relative to the accordance of NDII with soil moisture in the following paper: Castelli, G., Oliveira, L. A. A., Abdelli, F., Dhaou, H., Bresci, E., & Ouessar, M. (2019). Effect of traditional check dams (jessour) on

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soil and olive trees water status in Tunisia. *Science of The Total Environment*.  
<https://doi.org/10.1016/j.scitotenv.2019.06.514>

You might be interested in considering it for your introduction and discussion, since citing some research over the use of NDII in this sense may reinforce your work, which is however clear in its present form.

Moreover, since I am self promoting for citation one of my papers, feel free to ignore it. I wrote this comment only because, to the best of my knowledge, only your work is presenting NDII as a suitable index for monitoring soil moisture, and sharing some research could be useful for exchanging ideas.

For your interest, this is another paper where NDII was used for inferring on hydrological variables: Castelli, G., Castelli, F., & Bresci, E. (2019). Mesoclimate regulation induced by landscape restoration and water harvesting in agroecosystems of the horn of Africa. *Agriculture, Ecosystems & Environment*, 275, 54–64.  
<https://doi.org/10.1016/j.agee.2019.02.002>

Many best,

Giulio Castelli

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Interactive comment on *Hydrol. Earth Syst. Sci. Discuss.*, <https://doi.org/10.5194/hess-2020-82>, 2020.

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