Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2020-580-RC3, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.



Interactive comment on "Influence of ENSO and tropical Atlantic climate variability on flood characteristics in the Amazon basin" by Jamie Towner et al.

Anonymous Referee #1

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About this:

Page 11, line 30, negative ENSO years? Here, we are referring to the results from the negative phase of ENSO compared with the neutral ENSO phase. As we have performed a tercile analysis we are taking the difference between years identified as positive or negative with respect to neutral years. This could also be referred to as La Niña years, as all of the years within the negative phase reach the Oceanic Niño Index (ONI) threshold of at least a weak La Niña event.

ENSO is a phenomenon of the air sea interaction. It can be quantified by indices such SOI, ONI, or SST (ex. Nino 3.4), if the SOI is negative and Nino 3.4 is positive we may

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have an indicator of El Nino. It is not correct to say Negative or Positive ENSO years, you can say negative phase of the ENSO if referring to SOI (El Nino) or positive if it is La Nina. But if you use SST it could be positive ENSO phase (warm) or negative ENSO) phase if it is cold in the equatorial Pacific. (La Nina). Therefore, the term "negative ENSO years" it does not make any physical sense, it is not clear what inbdice yiou are using for.

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