

Interactive comment on "Hydrological response in the Danube lower basin to some internal and external climate forcing factors" by I. Mares et al.

Anonymous Referee #2

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Studying the impacts of climate system on hydrology is the focus of many studies. Different from other studies that mainly focus on the internal climate factors, this study focuses on both internal and external climate forcing factors. This would give us a bigger picture of the hydrological impacts from the climate system. The manuscript also provides enough results to support their conclusions. With that being said, the manuscript is worth publishing. However, the manuscript is so poorly written that it is full of grammar errors. This will cause a lot of troubles for readers to understand. Therefore, I urge the authors use more efforts in writing. I highly suggest the authors do a line by line editing and perhaps seek help from colleagues or professional editing.

Correlation is heavily used in this study. However, can you give the physical explanation behind the high or low correlations? This can be done by providing some background knowledge on the feedbacks among these processes in the Introduction, or by provid-

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ing more meaningful justification in the result section.

A good abstract usually begins with a general statement about the field of research which provides readers with a setting for the problem(s) to be addressed in the paper. I suggest the authors add this kind of information to the abstract.

The authors give very brief information about other similar studies at the end of Sections 4.1 and 4.2. However, it would be better if this can be expanded a bit. For example, how do the results from this study compare to other previous studies?

Line 19: what does "simultaneously" mean here?

Line 28: should "simultaneously"?

Lines 48-49: "As shown in Cubasch et al. (1997) and Benestad and Schmidt (2009), it is difficult to distinguish . . ." reads better?

Line 55: Should be "Brugnara et al. (2013) reviewed ...". There are many more similar errors throughout the manuscript. Please modify them.

Lines 61-67: Do you include greenhouse gases in this study? If not, you may not need to mention it here. But this will be up to the authors.

Line 83: "NAOI" is used before definition, even though it is defined in abstract.

Line 95: Should be "for the first time"?

Lines 117-125: It seems to me that the detail information about methodology needs to be moved to Section 3.

Line 134: I could not find the section 4.3.2.

Line 169: "girded" should be "gridded"?

Line 240: serial correlation is not a common concept in hydrology, can you please provide the equation(s).

Line 304: Is it a good idea to cite so many conference abstracts? The information provided by an abstract is very limited.

Line 340: add the threshold 0.254 into Figure 6.

Figure 6: Add notes to give the full names of the "nine predictors".

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