

## ***Interactive comment on “Atmospheric controls on hydrogen and oxygen isotope composition of meteoric and surface waters in Patagonia” by Christoph Mayr et al.***

**Christoph Mayr et al.**

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Reply to comments of Reviewer 2:

Reviewer 2: This paper evaluates the stable isotope compositions of precipitation, lentic waters, and lotic waters in that area to characterize and understand isotope fractionation processes associated with orographic rainout, moisture recycling and moisture sources. I think this paper is relevant since it studies isotopes and the relevant literature cited, however it requires major revisions. The manuscript is interesting but written is poor. It is difficult to catch the authors' messages to readers.

C1

Reply: The critical comments at the end of the paragraph unfortunately are rather unspecific. Thus, it is not possible to directly respond. There may be linguistic flaws in the text, but no example is given by Reviewer 2. The message to the readers will be improved by adding more background details, as suggested by the reviewer in the specific comments.

Reviewer 2: The results are original and represent an important contribution to the understanding of the controls on hydrogen and oxygen isotope composition. However, my main concern is that the problem statement is not clearly defined and that the field description is not sufficient as it is.

Reply: We will clarify the information on the research objectives and the field description in a revised version.

Reviewer 2: Specific comments: Abstract: This is mostly composed of the Introduction and Material and methods. So, I do not think the abstract is attractive.

Reply: We agree that our results and conclusions should be highlighted in more detail in the abstract. We will do so in a revised version.

Reviewer 2: Introduction: Describe more paper about the stable isotope compositions! which problems? why is this study important?

Reply: We agree that this part could be more elaborated and will add additional information in a revised version.

Reviewer 2: Material and methods: Detail more the monitoring and describe the collection methodology.

Reply: We can add additional methodological details in a revised version.

Reviewer 2: I think the paper would be better if the authors combined the results and discussion.

Reply: We do not see a reason in the reviewer's comment for merging results and

C2

discussion to one chapter and prefer the chapter structure as it is.

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2018-431>, 2018.