

## ***Interactive comment on “Also tropical freshwater ostracods show a seasonal life cycle” by Juliane Meyer et al.***

**Juliane Meyer et al.**

juliane.meyer@uni-graz.at

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### General Comments from the Authors

We thank the anonymous referee for the critical and helpful comments on our open discussion paper. Many comments are similar to the once of the first referee J. Holmes.

The major concerns of the referee refer to the inexact formulation of the aims of the study and related discrepancies in the whole manuscript due to imprecise and/or missing information in the abstract, introduction and methods that are relevant for the structure of the paper and further interpretations in the manuscript. Many comments suggest, that the separation between the spatial comparison of the investigated sites based on our data, and the modelling of calcification periods based on instrumental

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background data is unclear. Thus, some of the referee comments arise from the misunderstanding which data have been used for the single parts of the study. Minor concerns have been given to the differentiation between juvenile and adult isotopic measurements, the averaging problem of sample bulking and some structural weaknesses on the seasonal variation of climatic and isotopic background data and parts of the discussion.

We checked the manuscript carefully and will edit it respectively to the suggestions of both reviewers. This includes the following points: The title will be changed to “Modelling calcification periods of *Cytheridella ilosvayi* from Florida based on isotopic signatures and hydrologic data” to point out the most important discovery of this study. Further, the abstract and introduction will be rewritten to add missing information suggested by the referees and reformulate the aims of the study to differentiate clearly between the spatial comparison of ostracod shells and their host waters and the subsequent seasonal modelling for river samples based on the within-sample variability and instrumental background data. Additionally, further information on the model will be given to better explain the significance of the model. In addition, discussion will be added referring to the difference between juvenile and adult isotopic measurement and the effect of “bulking” on the isotopic variation. Based on this discussion samples CAL-1 and CAL-2 are unsuitable for the modelling of calcification periods and will be excluded. Thus, Figure 8 has to be changed. According to the suggestions of the referee and the changes mentioned above, the conclusions have to be rewritten. Finally, spelling mistakes will be corrected according to referees and beyond.

More detailed comments will be given point by point as received in the referee comments in the following pdf file

Please also note the supplement to this comment:

<http://www.biogeosciences-discuss.net/bg-2017-38/bg-2017-38-AC1-supplement.pdf>

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