

## ***Interactive comment on “Dynamics of water fluxes and storages in an Alpine karst catchment under current and potential future climate conditions” by Zhao Chen et al.***

**Zhao Chen et al.**

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Received and published: 7 February 2018

Reply to Editor's comment regarding the response to the Reviewer 2 on the manuscript "Dynamics of water fluxes and storages in an Alpine karst catchment under current and potential future climate conditions" by Zhao Chen et al.

Editor's comment: You have left unanswered the question by reviewer 2 about the scientific merit of this study.

Answer: We believe that the main scientific merit of this study is to better understand the highly variable groundwater dynamic in mountainous karst catchments, which can

C1

be highly vulnerable under future changing climate conditions. Our paper presents the first study to investigate potential impacts of climate change on mountainous karst systems by using a combined lumped and distributed parameter modeling approach with consideration of subsurface karst drainage structures. Additionally, this work presents a novel holistic modeling approach, which can be transferred to similar karst systems for studying the impact of climate change on local karst water resources with consideration of their individual hydrogeological complexity and hydraulic heterogeneity. This novelty will be better explained in the revised paper, both in the introduction and in the conclusions.

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2017-216>, 2017.

C2