

Interactive comment on “The relevance of glacier melt in the water cycle of the Alps: an example from Austria” by G. R. Koboltschnig and W. Schöner

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We thank very much for this valuable short comment. The intention of this paper is to give a review of available methods for the calculation of the glacier melt contribution on different spatial scales, which is a very important hydrological question in recent time. We wanted to show actual and future research questions, which should be addressed in mountain hydrology. This is strictly in the frame of the 2009 workshop in Goeschenen (CH), which lead to this special issue and the discussion paper of Viviroli et al. (2010). Furthermore we wanted to show our simple method, which evaluates the anomaly of the August 2003 runoff for different catchments with different glaciations.

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The result shows that there is no linear relation between the August 2003 anomaly and the glaciation. There are several other parameters taking influence on the glacier melt contribution. The method we introduced won't be able to provide more insight. Hence, there is a need for and there are already some models, which can simulate melt contribution under changing climate (past, present, future) and topographic conditions. Our method is able to give a good qualitatively and robust estimate of the possible glacier melt contribution. It clearly shows the range where glacier melt still has an influence and where not.

We will enhance the result section and give some more conclusions concerning your suggestions.

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