

Interactive comment on “Impacts of climate change scenarios on runoff regimes in the southern Alps” by S. Barontini et al.

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After having received all the Editor's and Referees' improvement suggestions, we accepted and discussed most of them in the submitted version of the paper. Particularly we decided to:

- readdress the paper no more focusing on 'climate change scenarios' but only on 'GCM scenarios'. This choice could better merge and explain its contents. Anyway a discussion about the choice we performed of using GCMs instead of RCMs is provided;
- shorten the introduction and other points addressed by both the Referees. In this
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process we tried to preserve the methodological aim of the contribution but many details were reduced to leave space for discussions about the simulations and the results;

- detail some aspects of the glaciological approach we adopted for the Lys glacier, as particularly raised by Referee #1;
- detail some aspects of the simulation code and of the fitting procedure;
- detail and discuss the indexes of performance we used during the calibration process, also regarding to the goals of our simulations;
- move the downscaling procedure to the Appendix and leave within the text only a quick introduction about it explaining its rationale;
- give an estimate of the expected inter-model variability for different scenarios in the estimate of the annual runoff volume, and discuss our results also after this comparison.

For the details on the correction, we refer to our previous communications, particularly to that addressed to Referee #1.

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