

RESPONSE TO REFEREE 1

The manuscript is interesting and well-written, I have only minor comments:

We would like to thank the referee for his very positive review.

in general I would avoid repetitions in the intro and in the conclusions

We re-read carefully these two section to avoid repetitions. In the conclusion the major findings and the global settings of the study are highlighted. In addition the English has been checked throughout the paper

it is interesting that differences in runoff due to to climate change are larger in the low-resolution simulation with respect to the high-res; can the author guess why?

This is hard to tell and we have no explanation. Indeed our results indicate that the RCM reproduce less reliably the observed climate at a 50km than at the 12km resolution. Therefore projections made with this model setting might be less reliable however the past model skills does not necessarily warrant better projections:

Reifen, C., Toumi, R., 2009. Climate projections: past performance no guarantee of future skill? *Geophysical Research Letters* 36. doi:10.1029/2009GL038082.

5687:9 "tropical: -> "sub-tropical" 5687:27 "may be the particularly affected by climate change" -> "may be particularly affected by climate change" 5695:2 "It is worth nothing" -> "It is worth noting" 5722:5 "in validation in the hydrological model" -> "in validation of the hydrological model"

The text has been modified accordingly

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