

Interactive comment on “Future Flows Climate: an ensemble of 1-km climate change projections for hydrological application in Great Britain” by C. Prudhomme et al.

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We thank the referee for his/hers useful comments. As recommended, we suggest to add some extra sentences to address the referee comments as follows:

Point 1. 'HadRM3-PPE-UK is an experiment (...);' while it aims to represent parameter uncertainty through a parameter variant experiment, the ensemble under-samples the GCM uncertainty and excludes emissions scenario uncertainty. '

And [end of the same paragraph]: 'Detailed information on the model ensemble can be found at <http://badc.nerc.ac.uk/data/hadrm3-ppe-uk/>.'

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Point 2. [to insert after first sentence] 'Similarly to Piani et al. (2010) precipitation and temperature bias-corrections were done independantly. While this might introduce some physical discrepancies between both variables as it might modify their relationships, the introduced uncertainty is considered small compared to the range of other uncertainty sources.'

Point 3. [to instert before the last 2 sentences of last paragraph of 3.1] 'Applying the bias correction to 25-km grid scale ensures that spatial dependency of rainfall time series (important for hydrological modeling) within each grid square is maintained. This is not guaranteed from one grid to another but the evaluation of the resulting time-series at catchment scale suggests the method to be appropriate (not shown).'

Point 5. [after last sentence] 'This is showed by the error associated with FF-HadRM3-PPE as input of rainfall-runoff models being within acceptable modeling errors (Prudhomme et al., 2012).

We do not feel it is possible to address appropriately the point 4 in this short communication but this is planned to be done in a separate method paper.

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