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The study aims to assess the impacts of the uncertainties of atmospheric forcing to the hydrological output of a land surface model. Four different meteorological datasets were used to drive the LSM model. Outputs were validated against point river discharge measurements and remotely sensed soil moisture and leaf area index. Forcing uncertainty was quantified for all combinations of forcing and output variables.

I commend the authors for their high quality research. Their study address highly relevant research within the scope of the journal. The manuscript is well structured and the presentation of the experimental design, models and data is excellent. Considering these, my suggestion to would be to be published after addressing some minor comments:

Page 2 – Line 26: I assume spatial scales are expressed in exponents

Page 5 – Line 22: please define the finer spatial scale.

Page 6 – Line 20: The adjustment of just one of the forcing variables (precipitation) leads to physical inconsistencies (Haddeland et al, 2012; Sippel et al, 2016). Authors could elaborate on this.

Page 7 – Line 10: Information regarding the impact of bias adjustment on large scale hydrological outputs are documented by Hagemann et al, 2011; Muerth et al, 2013; Papadimitriou et al, 2017.

Page 7 – Line 5: Replace “extrapolated” with interpolated or simply re-mapped.

Page 7 - Section: Atmospheric reference datasets. The atmospheric reference datasets that are used for comparison with the forcing are not, in some cases, independent. For example air temperature of WFDEI and PGF are bias corrected using datasets and compared against CRUv3.21. Several additional state of the art meteorogical datasets exist and could be used, like for example:

- The Berkeley Earth Surface Temperatures (BEST) (Rohde et al, 2013)
- NASA Goddard's Global Surface Temperature Analysis (GISTEMP) (Hansen et al, 2010)
- Global Historical Climatology Network (Lawrimore et al, 2011)
- Global Soil Wetness Project dataset (GSWP3) (Yoshimura and Kanamitsu, 2013)

Authors could reflect on that.

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