This manuscript presents an attempt by the authors to investigate the effect of non-stationary biases may have on the performance of multivariate bias-adjusting methods for regional climate models. To do so they have used four multivariate methods (MBCa, MRQNBC, R^2D^2, dOTC) and two univariate ones (QDM, mQDM), to adjust bias in the output from a single GCM-RCM run (12.5km RCA4 forced with boundary conditions from the MPI-ESM-LR global model) for three climate variables (temperature, precipitation, and evaporation). Precipitation and evaporation have been used to drive a rainfall-runoff model as a test of the impact that bias adjustment can have on variables used for impact studies. The authors conclude that non-stationary biases are important for bias adjustment procedures without reaching a firm conclusion on the issue of the relative performance of uni-and multivariate bias adjustment. I believe this is the result of poor methodological choices by the authors, which constrained their ability to reach a more meaningful conclusion in what is an interesting and relevant topic. More specific comments regarding the methods follow:

1. All the bias adjustment calibrations and validations were carried out using model output from a single model cell, of a single RCM-GCM combination, with a single observed dataset as reference. Therefore, the results presented in the paper may be unrepresentative of the behaviour of the bias adjusting methods, which could be explored much more robustly by exploring multiple locations and models. The data choices give the authors a single comparison point for the bias correction methods, a larger sample would help reduce the uncertainty present in the results and possibly lead to stronger conclusions.

2. The results are unclear; they lack clear trends and demonstrate the limitation of the single-location approach as each seasonal index is plotted once and therefore no conclusion can be drawn as to how representative the results really are. While the indices used are useful in representing different portions of the distribution of each variable, no statistical evaluation of the significance of the differences was attempted, either through the use of summary statistics or graphically.

3. The emphasis given to hydrological models in the abstract is lost throughout the paper. Very little detail is provided about the rainfall-runoff model in the methods, in particular there is a single RMSE value as sole evidence of model calibration with the reader referred to a previous paper for details despite this being a key aspect of the paper. In addition, the data point used to evaluate the bias methods lies outside the model catchment and no evidence is provided to support the similarities between the sites.