Interactive comment on "Bias correction of Simulated Historical Daily Streamflow at Ungauged Locations by Using Independently Estimated Flow-Duration Curves" *by* William H. Farmer et al.

Anonymous Referee #1

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This is an interesting paper, which in my opinion could be made easier to follow with some adjustments. I make a few suggestions that I honestly believe could improve its readability and subsequent impact.

Major Remarks

1. My major problem is with the structure of the paper and with its illustrations: 1.1 Even a specialist of statistical hydrology could use one or two hydrographs (you only show us box plots!). An introductory graph with an example hydrograph and FDC could help

the reader understand your methodology. 1.2 I do not like the way you deal with all the aspects of the methodology in parallel, it makes things very difficult to understand what you are doing. I would have preferred a paper structure where (a) you show us what a "perfect" simulation of the FDC used for bias correction could give for results, then (b) you would show that due to the inherent uncertainty of FDC prediction at ungauged points you loose a lot of the theoretical advantage, while managing to improve overall bias 1.3 Last, I believe that in addition to box-plots, you should also show the reader some QQ plots to show that even if on average there is a reduction of bias, there will always be catchments where the bias correction method will increase the bias : e.g. a plot showing the original low flow bias vs the bias corrected low-flow bias (with one point per catchment), and then the same for high flow.

Minor Remark 2. P2L15. "the nature of this approach..." : I have difficulties to understand this sentence...

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