

Answer to Reviewer #1 comments

>l. 44 : "the assess to" check English
Done

>l. 167-174 : on the presentation of the data. I think it would be interesting to include in the text what you answered to my comment on this issue ("vast number of local water intakes ... fenced and guarded for safety reasons")
Done

>l. 185 : mention in the text that it is for 15 min, because not obvious at a first glance of the figure
Done

>l. 283 : usually in the framework of cascade process lambda refers to the resolution ($=L/l$, the ratio of the outer scale to the observation scale) so this notation is slightly confusing, and I would suggest to change it. l (or t) could be used.
Here we have preferred to maintain the symbol "lamda" in agreement to the notation reported in our previous works.

l. 243 : "cascade tier", I am more familiar with the terminology "cascade step"
Fixed

l. 474-477 : add a sentence with a translation in physical words so that the reader do not have to do it.
Done

l. 513-519 : does it also mean that there is no effect of climate change (or not detected with this technique). May be it could also be mentioned, despite the shortness of the series to achieve such a study.
Done

l. 520-561 : I would include this a dedicated sub-section
Done

l. 585 : "increases increasing" - - > "increasing with greater time scale" ?
Fixed

Answer to Reviewer #2 comments

>1) I believe that it should be clearly stated in the introduction section of the manuscript (lines 90-95 of the revised paper) that the information content of historical records is not increased by data generation, which just provides an operational basis for the extraction of such information.

Yes, we agree, and we have fixed it in the revised version of the manuscript (see lines 95-98).

>2) In order to achieve the objective above, the synthesized sequences should resemble the historical base in terms of statistical parameters. This is not the case with MCMs. As these problems have now been identified, I believe the new research should try to avoid or tackle them, rather than hide them by suggesting new algorithms to increase the use of MCMs in urban hydrology. In my view, this was the message conveyed by the previous version of the manuscript, and that is why I did not recommend its publication. In the revised version, I appreciate that the Authors acknowledge that MCMs have severe limitations (cf. lines 149, 535-536, and 688), thus their blind use in hydrology is definitely not recommended.

Many thanks for this comment, we have appreciated it a lot.

>3) Line 243: $2^{(k-1)}$ should read 2^k-1

Fixed.

Answer to Reviewer #3 comments

>My first major concern is that the the methodology is not new in comparison with previous publications. The authors respond by saying that the novelties are explained in the abstract and the end of the introduction. That is OK, but I (and also the other reviewers) explicitly asked for the novelties in comparison with the previous publications by the authors. This is not answered, neither in the paper, neither in the response note.

Many thanks for this comment. The novelties reported in the abstract and at the end of introduction are to be intended as novelties respect the existing Literature and the previous publications by the authors.

>My second major concern is that the methodology proposed by the authors does not really help in solving the data shortage problem, because rainfall statistics derived from short periods may be biased against long-term statistics (e.g. due to climate oscillations). I was asking that the authors would stress on this limitation in their paper, but they did not do at all. Additional analysis is now shown, based on 5-year subperiods in a 25-year long series, and this is a useful analysis to add, but extensive discussion on the limitations of the method need to be added throughout the paper at various places. Speculation is now added to section 3.3 that the short data series is not a problem based on the additional analysis done, but there is clear evidence (from the literature) that this is a wrong speculation.

Many thanks for this comment. In the revised version of the manuscript, we have stressed this limitation, see lines 538-553.