

The article by Gerkema and Duran-Matute has been revised, taking into account the other reviewers' and my own comments. But, I am still not entirely satisfied with the reversion, especially the way uncertainty was calculated and discussed. Reviewer 3 shared similar concern. Sea level records show a high degree of autocorrelation, and the authors should consider adjusting the way of calculating the interval of trend. I suggest the authors use the AR1 process to calculate the effective sample size (eq 6 in Zwiers and von Storch, 1995, [https://doi.org/10.1175/1520-0442\(1995\)008<0336:TSCIAI>2.0.CO;2](https://doi.org/10.1175/1520-0442(1995)008<0336:TSCIAI>2.0.CO;2)) and then use the effective sample size to calculate the uncertainty (Page 3, Line 10-13). This has already been suggested by Reviewer 3, but the authors did not follow. Of course, all of their discussion of uncertainty should also be revised according to the new calculation.

*We thank the reviewer for this valuable suggestion, which we have followed, resulting in new confidence intervals in Figures 2 and 9, and in Tables 1 and 2 (last row). Corresponding changes in the text are now indicated in blue. The main conclusions still stand, but we find that a correction for atmospheric effects now reduce the confidence interval even more than in the previous calculation. Regarding the reference mentioned by the reviewer, we think that the formula has a typo (tau should be rho) – for this reason, we refer to a paper by Santer et al. (2000), where the expression is stated correctly.*