

Point by point reply to the Interactive comments of Anonymous Referees

Dear Editors,

Please find the final version of the manuscript attached,

We thank both Reviewer 1 and Reviewer 2 for their second thorough reviews and for their suggestions that helped us greatly improve the manuscript. Below, we answer to one question from Reviewer 1.

-> P.13 L.249 "Also, Figure 8 exemplifies the impact of accounting for decreasing trends in return levels." : I do not see why Fig.8 shows this.

I give the reason in the sentence following the cited sentence:

"Indeed, we observe that return levels from the stationary Gumbel model M_0 (left) are often larger than effective return levels in 2019 (last year of data) from the selected model M_N (right)"

In other words, Figure 8 shows that the decreasing trends in return levels imply that effective return level in 2019 are smaller than stationary return levels. Indeed, we see on the Figure 8 that the green line on the left plot is often above the green line on the right plot (especially for the Beaufortain massif).

We hope that this answer will be found suitable.

Yours sincerely,

On behalf of the co-authors

Erwan Le Roux