Dear Sir, Dear Madam,

Thank you again fro your remarks and suggestions. These helped us greatly in improving the quality of the paper. Most of your comments have been throughly applied and we provide here a summary of the main modifications done on the paper.

1. Introduction

- We agree that it is simpler to merge figures 1,2,3 into a single composition. This has been done.
- Lines 30 and 31 are rewritten in a clearer way.
- Line 38 : The term "sea storm" was not a good choice, replaced by storm surge.
- Lines 44-45 : There was a confusion in the references. The interpretation and citation have been corrected.

2. Data

- The expression "very precise but is enough for our use case" was too vague and thus we rewrote it. It is now more precise.
- The subsection have been renamed according to your suggestions
- We however kept the term "Still water level" as this is the name used in the original database.
- We added a paragrapg in section 2.4 to mention what H and N0 refer to
- The order of peak selection did not result in any significant change in the distribution so we did not justify the choice of oriinal dataset. We added a paragraph stating it nonetheless.

3. Methods

- The history behind the copula was indeed superfluous and was thus removed.
- More references and explanations have been added supporting our choice of the Gumbel copula.
- Ks, d and L0 were indeed not described. This has been corrected.
- The use of H1/3 instead of H does not need to be justified here as it is precisely stated in the EurOtop that what they call H is indeed the significant wave height. It is our fault that we did not harmonize the nomenclature between our equations and the EurOtop. This has been corrected.
- The method developed by Sobol was removed according to your remark.

4. Results

- We catched and error in our calculation, resulting in slight changes in the final results of the Sobol' indices. Figures and interpretations have corrected accordingly.
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- The interperation of the parameters infuence has been rewritten to not mention vague statements such as "mild but significant".
- The high values of the Total effect Sobol' Index shows that there is some amount of coupling in the data.

- We thought that adding contour lines on the copula for low and high independence was indeed a great idea. The Figure was thus modified to discreetly display them.
- The uncertainty related to the GEV fit is so low that we did not mention it in our calculation. Was added a paragraph stating it.
- Figures 6 and 7 should in our opinion be kept as tey provides visuals checkpoints of our whole process. Making the understanding of the paper easier.
- Figures 8 and 9 are merged into a single one but we kept them in the validation section as it is the whole purpose of their existence. We don't consider them as results as they may not be always usable in any context.
- We added references supporting the choice of the GEV distribution

5. Technical Corrections

- all done and applied according to your remarks.