

This new version of the manuscript has been improved from the original one and the author has considered most of my comments. I still have a couple of items I would like to see in the final version. Otherwise, the list of minor comments can be found below.

#### General Comments:

- The author discussed in the method section (lines 131-136) about the fact that change in extremes is not accounted for i.e. by 2150, the model considers extremes will follow the same statistics as present time. I think it's an important point and the author point out if such data were existing, they could be plugged into the model.

I think it would be good to restate this point / discuss it in the conclusion as a caveat.

- I still find the figure font quite small, and I still believe having a twin axis with return period in addition of frequencies would be useful for a reader. Especially as the tool is intended for decision makers; a return period is more likely something perceived by the potential users compared to a frequency.

#### Minor Comments:

- line 36: "This is of course a great hindrance", maybe "barrier" or "Obstacle" instead of "hindrance"; this is just a suggestion
- Line 66-68: "the first paper..." and later "second paper"; Citations are missing. Which papers? also I would suggest using "study" or "work" instead of paper
- Line 70: maybe itemise the new features?
- There are a multitude of figure reference with the ")") I would remove it. E.g. instead of "Fig. 1b)" just write "Fig. 1b" etc – all the references to figure 1 basically.
- In Figure 1, the location of b) is not great. Top left corner would be better.
- Line 108. This sentence is not needed. This has already been explained few times. "Each such one armed bandit implies that there is a random process in operation when going from one module to the next."
- Around line 150, maybe add a number to each module in figure 1 so you can refer it in text. The sentence would be more fluid. For example: "in the third and forth module from the left in Fig. 1 " could be simplified to "in the third and **fourth** moduleS"
- Line 156: "ascribed" maybe "attributed" instead – again just a suggestion.
- Line 233: "it is plain to see that both the mean and the mean + extreme panel of the plot are dominated by this scenario at frequencies lower than approximately  $10^{-3}$ ." not fully sure it is that obvious without comparing to the simulation without the low confidence scenarios.
- Line 281-282: The upper panels show the relative density of the mean and extreme sea level contributions to the joint sea level maxima. Reverse to match how they appear in figure (left is extreme and right mean).
- Line 286: "does give" maybe just "give"
- Line 308: "examples by (Hieronymus, 2021; Hieronymus and Kalén, 2022)." Remove parenthesis.
- Line 314: "The list of possible new applications is very long." replace "very long" by "extensive"
- Line 320: "find the the inverse" remove one "the"