

The manuscript has improved significantly, and the authors have addressed all previous review comments thoroughly. I have additional minor comments, highlighted in yellow:

-Terminology Precision (Lines 80ff): Ensure consistent and precise use of "risk" and "probability." It would be helpful to define key terms explicitly. For example: What constitutes risk? Are risk factors treated as variables, probabilities, or both? Does Research Question 1 focus on estimating the probability of island inhabitability? How is risk level determined? What are the drivers of risk? Later in the manuscript, risk criteria are introduced with a 1–5 scoring system. While the methodology clarifies the model and its variables, the Introduction would benefit from clearer definitions and framing to enhance coherence and reader understanding.

Thank you for this insightful comment. We fully agree on the importance of precise and consistent use of terminology to avoid any confusion. In response, we have revised the Introduction to define the key terms. We have included the following definitions: In our study, we followed the terminology used by Duvat et al. (2021) to ensure consistency.

***Risk:** Defined as the potential for adverse consequences to atoll socio-ecosystems from climate change, following the IPCC (2022) definition. **Habitability pillars:** These are defined as the essential dimensions of habitability in small islands: available land, freshwater supply, food supply, settlements and infrastructure, and economic activities, following Duvat et al. (2021). **Risk factors / Risk criteria:** here, we define risk factors or criteria as the main factors contributing to the risk to the habitability pillars. We used 14 risk factors identified by Duvat et al. (2021), including coastal erosion, flooding, fresh groundwater salinization, reduced reef fisheries production, loss of settlements, and reduction in tourism revenue. In our study, the risk factors are variables within our Bayesian network. In the previous version, we used the term “Drivers of risk” to refer to “Risk factors”. We have revised the manuscript to use only the term “Risk factors” to ensure consistency. **Risk level:** This refers here to a scale describing the future additional risk from climate stressors (from “Undetectable” to “Very high”). **Probability of risk level:** This refers here to the probability that a given risk level will occur under specific conditions. The probability of risk level is calculated by the Bayesian Network and reflects the uncertainty about the future risk.*

-The term climate stressors is used here to define the risk level, but it is not mentioned anywhere else in the manuscript and not defined. Maybe risk factors could be used instead to be coherent?

-I cannot unambiguously find the case site Tabiteuea, North Tarawa, Kiribati. Maybe a more detailed description where this island is is necessary? I could only find Tabiteuea as an atoll island, or a church called Kiribati Uniting Church - Tabiteuea on Tabiteuea, North Tarawa on Google Earth, but the satellite image does not seem to match with the one from the paper. I would like to know the coordinates to identify the case site.

-Typo for one of the sites: Fongafale, Tuvalu. It is written as Fogafale in the manuscript.