**Dear Editor,**

**You will find hereafter an answer (in bold writing) to each comment provided by the 2 referees and the action we operated in the revised manuscript (in red).**

**Referee #1**

Line 55 Reference for Walter and Sheppard, 2009 is absent in the List of References → **This missing reference will be added. [Walter, R., & Sheppard, P. (2009). A review of Solomon Island archaeology. Lapita, ancestors and descendants. New Zealand Archaeological Association, Auckland, New Zealand, 35-72.]** → **added to the reference section.**

Lines 90-91 "largest ones could have return periods OR hundreds to thousands of years"
- "or" is obviously mistyping → **"or" will be replaced with "of".** → **fixed**

Line 102 Reference for Tendrayen, 2006 is absent in the List of References → **This missing reference will be added. [Tendrayen M., 2006 – Modélisation numérique du tsunami du 2 janvier 2002 au Vanuatu. Rapport de stage d'ingénieur ENSIM. 63 p.]** → **added to the reference section.**

Line 104 Reference for (Roger et al., 2023) should be typed as (Roger et al., 2023a) → **The reference will be corrected.** → **fixed**

Line 109 "which is way too low resolution" – "way" –looks like mistyping → **This sentence will be rewritten with "which has too poor resolution".** → **replaced with "which shows too poor resolution".**

Line 167 It is OK to make a "notice to reader" saying that some of oldest references will not be included in the List of References but then their mentions in the text should be followed by indication to the catalog where they come from (like it is made in lines 198 and 232) → **The mention to the corresponding catalog will be added for each reference**. → **added**

Line 176 "One people was drowned, and others were severely hurt". If this relates only to Aneytium Island, it should be clearly stated. Otherwise, this could be associated with the mortality of the whole event (25 victims) → **It relates only to Aneytium Island. The sentence will be modified so that it is clearly stated. "On Aneytium Islands one people was drowned, and others were severely hurt (Inglis, 1887 in Louat and Baldassari, 1989)."** → **changed accordingly to our answer.**

Line 231 Reference for Taylor et al., 1980 is absent in the List of References → **this missing reference will be added. [Taylor, F.W., Isacks B.L., Jouannic C., Bloom A.L., Dubois J., 1980. Coseismic and Quaternary vertical tectonic movements, Santo and Malekula islands, New Hebrides island arc. J. Geophys. Res., 85(B10), 5367-5381.]** → **added to the reference section.**

Line 305 Reference for (Gusman et al., 2022) should be typed as (Gusman et al., 2022a) → **The reference will be corrected.** → **fixed**

Line 315 “On 19 May 2003” should be typed as “On 19 May 2023” → **This date will be corrected.** → **fixed**

Lines 347-348 Reference for (Roger et al., 2023c) is absent in the List of References → **The correct reference is Roger, 2023. It will be corrected. This reference is present in the List of References.** → **fixed**

Line 385 Reference for (O’Reilly, 1956) is absent in the List of References → **In agreement with the disclaimer at the beginning of the section, this reference will be replaced with “O’Reilly, 1956, In Louat and Baldassari, 1989”.** → **added**

Line 396 Reference for (Carney and Campillo, 1980) is absent in the List of References → **In agreement with the disclaimer at the beginning of the section, this reference will be replaced with “Carney and Campillo, 1980, In Louat and Baldassari, 1989”.** → **added**

Line 402 Reference for (Carney and Campillo, 1980) is absent in the List of References → **See previous answer to comment.** → **added**

Line 514 “New insights on 144 the tectonics of the New Hebrides” – 144 looks like a ostyping → **this typo will be fixed.** → **fixed**

Line 542 Reference for Gusman et al., 2022b is not mentioned in the text → **“The widespread tsunami triggered by the 15 January 2022 eruption of the Hunga Tonga-Hunga Ha’apai volcano was well recorded on the Vanuatu tide gauges VANU, LITZ and LUGA (Figure 7).” Will be replaced with “The widespread tsunami triggered by the 15 January 2022 eruption of the Hunga Tonga-Hunga Ha’apai volcano was well recorded in the southwest Pacific Region (e.g., Gusman et al. (2022b)), and particularly on the Vanuatu tide gauges VANU, LITZ and LUGA where it reached amplitudes of 0.5 m and more as shown on Figure 7.”** → **changed accordingly to our answer.**

Line 593 Reference for Roger, 2023 is not mentioned in the text → **See answer to comments related to lines 347-348.** → **fixed**

Line 633 Tryon, D.T., & Hackman, B.D.: should be typed as Tryon, D.T. and Hackman, B.D.: → **This will be corrected and the whole references list checked carefully.** → **fixed and checked.**

Line 636 Witter, J.B., Self, S.: should be typed as Witter, J.B. and Self, S.: → **This will be corrected and the whole references list checked carefully.** → **fixed and checked.**

Lines 636-639 Reference for Wallez et al., 1998 should go before the reference for Witter et al., 2007 → **This reference will be moved at the right place. Note that it is “Wallez, 1998” in the manuscript and not “Wallez et al., 1998”.** → **moved at the right place**

Final remark concerns Section 2 where in lines 119-124 the authors are not quite correctly reflect the content of two global tsunami databases (NGDC/WDS and TL/ICMMG) as related to the area under study. They make a search of historical events for this area using location “Vanuatu” as a search criteria while the correct search should be made for the event

occurred within a specific geographical area. In fact, request made in the TL/ICMMG database for the event search within the source area 25S – 9S, 161E – 175E (that corresponds to the geographical area shown in Fig.3c) returns 86 historical events for the period from 1452 to 2023. The same request for the NGDC/WDS database returns 83 events for the period from 1863 to 2023. → **We agree with the referee's comment and will modify the paragraph to make it clearer for the readers. However, the search on the two indicated online databases using the coordinates of the region provides only a list of tsunamis which sources are located within this extent. As an example, it does not provide the tsunami of 5 March 2021 generated in the Kermadec and which was recorded by all the Vanuatu Arc coastal gauges.** → **text modified accordingly to comment and answer.**

**Referee #2**

Pie chart showing the distribution of the number of tsunamis by their generation mechanisms. → **We could add a pie chart showing the distribution of tsunamis depending on their generation mechanisms; however, we like to underline that** *(as already indicated in the text lines 147-151)* **for the 100 tsunamis reported in the present catalogue, 5 were triggered by volcanic eruption, 3 by earthquake and/or volcanic eruption, and 92 by earthquake. We don't think that a pie chart will improve the clarity of the message indicating that most of the events are related to seismic activity.** → **the pie chart is not included to the revised manuscript.**

In Fig. 2, it would be good to give the vertical axis on a logarithmic scale, preferably with a base of 2, in order to see the magnitude of the tsunami, as it was determined by Iida and Soloviev. → **That's a good idea and we will add an additional plot to the right of the current figure showing the tsunami magnitude (m) vs. tsunami amplitude (Hmax) using Iida et al. formula $m = \log_2 Hmax$ . Note that we prefer to keep the current plot as it is showing wave amplitude (in m) as vertical axis for better understanding for non-specialists.** → **The plot has been added on the side on figure 2, along with corresponding text and references. Note that we didn't use Soloviev and Imamura scale as that one is using average tsunami amplitude, which does not make sense in our study considering the little number of observations.**

For intense tsunamis (with a height of more than 0.5 m), it would be good to construct a exceedance frequency curve on a semi-logarithmic scale in order to compare its appearance and parameters with those known for other regions. → **A tsunami exceedance frequency curve showing the cumulative rate of tsunamis ($yr^{-1}$) exceeding the amplitude/runup value given by the tsunami catalogue over the period 1863-2023 will be added following the work from Geist and Parsons (2006). However, note that the catalogue is probably not showing all the historical events over the considered period (especially during the non-instrumental period) and the number and types of observations are also not representative of all the locations in Vanuatu, which may result in bias and underestimation of the tsunami hazard.** → **Figure and related text added to discussion section; note that we kept tsunamis under 0.5 m and we plot the best fit by an upper-truncated power-law.**

It would be nice to give the dependence of the tsunami magnitude (height) on the earthquake magnitude, versus intense tsunamis. → **A plot showing the tsunami magnitude as a function of earthquake magnitude will be added to the manuscript.** → **Added.**

The authors name the tsunami of 10/04/1994 as Hokkaido (Japan), but we are used to calling it Shikotan (Russia) - line 326. → **The Russian name of the tsunami will be added to the Japanese one.** → **added**