Preprint egusphere-2026-4299: A revision of the Catalogue of tsunamis on the Spanish coast

Response to RC1 comments:

We sincerely thank the reviewer for the careful evaluation of our manuscript and for the constructive comments and suggestions. Please find below our point-by-point responses and the corresponding revisions made to the manuscript.

General comments

This manuscript presents a comprehensive revision of the Catalogue of tsunamis on the Spanish coast based on a critical reassessment of historical sources, existing catalogues, geological studies, newspaper archives and available tide-gauge records. The revised catalogue incorporates additional events identified through the reassessment of historical and instrumental evidence, while excluding others that are not sufficiently supported by the available information, resulting in a final catalogue comprising 16 tsunami events.

The manuscript clearly falls within the scope of NHESS. Historical tsunami catalogues constitute a fundamental component of tsunami hazard and risk assessments, particularly given that, for tsunami, long instrumental records are scarce, and historical information may play a significant role in understanding existing risk.

The work represents a valuable contribution to the tsunami scientific community. In particular, the extensive review of primary documentary sources and original marigrams is highly commendable and constitutes the principal strength of the study. The authors move beyond a simple compilation exercise and critically reassess the historical evidence supporting each event, which improves the traceability and transparency of the resulting catalogue. This effort will likely make the catalogue a reference for future tsunami risk studies in Spain.

The manuscript is generally well written, thoroughly documented and supported by a significant number of references spanning historical seismology, tsunami catalogues, geological evidence and instrumental observations. The figures and tables are overall appropriate, and the structure of the paper facilitates consultation of individual events.

I find the scientific basis of the manuscript to be generally sound and the conclusions to be consistent with the available evidence. The new catalogue represents an improvement over previous versions and the exclusion of some historically doubtful events appears justified.

My comments below are primarily intended to improve the clarity, reproducibility and scientific impact of the paper. In my opinion, most of the issues identified can be addressed through clarification, expansion of some sections and improvement of the discussion, without requiring substantial modifications to the catalogue itself.

Specific comments

1. Motivation of the study

The rationale presented in the Introduction could be strengthened. For example, the statement that the low probability but potentially high impact of tsunamis emphasizes the need for a comprehensive and reliable catalogue appears somewhat generic.

The authors may wish to more explicitly link the revised catalogue to specific applications, for example, in probabilistic tsunami hazard assessment, tsunami risk assessment and risk management.

The paragraph has been rephrased to address this comment together with Correction 1 and 2 under Technical corrections. Please see our response to Technical Correction 2.

2. Reliability index and reproducibility

The reliability assessment constitutes the main methodological component of the paper. Although it is clearly stated that the adopted scheme follows Tinti et al. (2004), some of the criteria used to assign partial scores (e.g., distinguishing between “scarce or uncertain information” and “good information” or between sources that are “posterior to the event date” and those that are significantly posterior”) inevitably involve a degree of interpretation.

Furthermore, relatively small changes in the assignment of partial scores may lead to substantial differences in the final reliability index and, consequently, in the classification of an event within the catalogue. It may therefore be useful to briefly describe how cases with limited or ambiguous evidence were assessed in practice, particularly when the available information did not clearly support a single reliability class. Such additional information would help readers better appreciate the robustness and reproducibility of the catalogue.

We agree that there is still a subjective component, as indicated by Tinti and Maramai (1996), who discuss the rationale behind the use of this index and provide a dedicated section describing its basis, while also acknowledging the judgement of the catalogue compilers regarding the quality of the data. With the aim of improving the degree of objectivity, Tinti et al. (2004) subsequently provide a more detailed description of the scoring system and its practical application, highlighting the need to apply the criteria coherently throughout the catalogue, and indicated in our discussion section. Accordingly, we have followed this when assigning the reliability scores in the present study.

However, we do not consider it possible to establish a set of general criteria that can encompass the different situations encountered when assessing the quality of the sources and data available for the investigated events. In this regard, we believe that the way in which the events have been scored is clear throughout the paper. In particular, the events classified as questionable, for which the rationale behind the assigned score may be less evident to the reader, are generally those where the tsunami sources and their descriptions contain some degree of uncertainty, preventing us from stating unequivocally that the event occurred as reported, or where only a single historical source mentioning the tsunami has been found, or the only available document refers to another source whose origin is unclear. For these events, a partial score of 1 is assigned for tsunami. The exception is the event with an unknown origin, which receives a score of 0 for the cause. Tinti et al. (2004) also provide some guidance for evaluating the available information.

As noted by Maramai et al. (2014), the main purpose of using the reliability index is to avoid the loss of historical events for which scarce data are available and for which there is considerable uncertainty regarding their credibility, the origin of the information, and/or the description of the event. In this context, the references consulted for each event are provided in the catalogue, allowing the end user to further assess the available evidence and the information on which the assigned reliability score is based.

3. Inclusion threshold of the reliability index

In Section 2, events with RI ≥ 2 are retained in the catalogue, whereas those with RI = 0 or 1 are excluded. While this criterion is clearly stated, the rationale for selecting RI = 2 as the threshold for inclusion in the Catalogue of tsunamis on the Spanish coast is not entirely apparent. A brief explanation of this choice could help readers better understand the philosophy underlying the catalogue construction.

We agree with the reviewer that readers would benefit from a clearer explanation of the rationale behind selecting a Reliability index of 2 as the inclusion threshold for the Catalogue of tsunamis on the Spanish coast. As indicated in the manuscript, the catalogue is also disseminated through the IGN website, where it is accessible to a broad audience, including non-specialists and media professionals. In this context, events included in the public catalogue may be perceived as equally reliable regardless of their assigned reliability index. To avoid potential misinterpretation, and to ensure that the catalogue includes only events with a minimum level of confidence that they represent actual tsunami events, we decided to include only events with reliability indices ranging from 2 to 4, i.e., events classified as questionable, probable, or definite tsunamis, although no event in the present catalogue falls within the RI = 3 (probable) category.

Events classified as improbable or very improbable (Reliability index of 0 or 1) are therefore excluded from the catalogue, although they are discussed separately in Section 5 of the manuscript.

We have therefore added an explanation at the end of the corresponding paragraph in Section 2, as follows:

“The resulting reliability index provides an overall indication of the degree of confidence that an event represents an actual tsunami, with values ranging from 0 (very improbable tsunami) to 4 (definite tsunami), as shown in Table 1. Events with reliability indices of 2 or higher are considered supported by sufficient evidence to justify their inclusion in the catalogue. This criterion ensures that the catalogue, which is also available to the public through the IGN website, contains only events supported by at least a minimum level of confidence. In contrast, events with reliability indices of 0 or 1 are considered too uncertain to be included in the catalogue, although they are discussed in the section *Improbable tsunami events*. “

4. Consistency of reliability classifications

The description of the catalogue inclusion criteria appears to be inconsistent between the Abstract, the Methods section and Table 2.

The Abstract indicates that the catalogue includes events with a reliability index of “probable and definite”, whereas the methodology states that events with RI ≥ 2 are included. In addition, Table 2 contains events classified as RI = 2 (questionable tsunami) and RI = 4 (definite tsunami), but no events classified as RI = 3 (probable tsunami).

I encourage the authors to clarify this apparent inconsistency and verify whether the wording in the Abstract or the assigned reliability classifications require revision.

We confirm that the catalogue inclusion criterion is RI ≥ 2. The fact that no event in our catalogue is classified as RI = 3 does not imply that this category was excluded. According to the scoring

scheme of Tinti et al. (2004), RI = 3 corresponds specifically to the combination of partial scores 2/2/1 (cause/tsunami/sources). In our assessment, none of the events included in the catalogue obtained this particular combination of scores.

Only if the source postdates the event by an intermediate period, i.e. several years after the event but before several tens of years or centuries later, is a score of 1 assigned to the sources. We also compared our scoring with previous classifications, including Maramai et al. (2019), and differences in the reliability assigned to individual events may arise from the specific historical sources available and evaluated in each assessment. Moreover, RI = 3 appears to be relatively uncommon also in the Italian catalogue, which contains only two events classified as RI = 3, as shown in the table of Tinti et al. (2004) and the histogram in Figure 6 of Maramai et al. (2021).

Therefore, the absence of RI = 3 events is a result of the evaluation of the available evidence for each event, rather than a consequence of the catalogue inclusion criteria.

According to this, we agree that the wording in the Abstract may be misleading because it does not reflect that, in our catalogue, the included events are classified as either RI = 2 (questionable) or RI = 4 (definite), with no event obtaining RI = 3 (probable). We have therefore rephrased this sentence in the Abstract to avoid ambiguity, without increasing its length:

“The new catalogue comprises a total of 16 tsunami events, classified as questionable or definite based on the available historical and instrumental evidence.”

5. Comparison with previous catalogue versions

One of the main outcomes of the study is the incorporation of new events into the catalogue and the exclusion of others previously considered reliable.

While this information is partially summarized in the Conclusions and Figure 8, the authors may consider adding a concise summary table comparing the previous and revised status of the events in the Catalogue of tsunamis on the Spanish coast. This could include newly incorporated events, excluded events and, where relevant, changes in their assigned reliability index. Such a synthesis would facilitate rapid identification of the principal revisions introduced by this work.

We thank the reviewer for this valuable suggestion. To facilitate the review process, we provide below a table comparing the events included in the previous catalogue of tsunamis affecting the Spanish coast with those considered in the present study. The comparison comprises 34 reported events, of which only 9 are common to both catalogues.

We have not incorporated this table into the manuscript because the main revisions introduced by the new catalogue are already discussed throughout the manuscript and summarized in the General Discussion and Conclusions section. Given the number of events involved, we considered that including the full comparison table would add substantial detail while providing limited additional insight into the principal findings of the study.

Nevertheless, if the reviewer and editor consider that the table would be useful to readers, we would be happy to include it either in the main manuscript or as supplementary material.

Date	*Reliability index*		*Revision*
	Previous Catalogue (1999)	*Revised Catalogue (2026)*	
218 (216) B.C.	0	No tsunami	Discarded
213 (210, 209) B.C.	0	No tsunami	Discarded
63 (60) B.C.	1	No tsunami	Discarded
21 July 365	-	No tsunami	Newly assessed
26 May (10 June) 881	0	No tsunami	Discarded
22 September 1522	-	2	Newly included
9 October 1680	4	2	Reliability downgraded
5 May 1706	3	No tsunami	Discarded
24 September 1774	-	No tsunami	Newly assessed
1 November 1755	4	4	Unchanged reliability
2 November 1755	0	-	No tsunami in the Spanish coast
16 November 1755	2	0	Reliability downgraded- Excluded
31 January 1756	0	0	Unchanged reliability- Excluded
31 March 1761	-	2	Newly included
9 October 1790	3	2	Reliability downgraded
13 January 1804	4	2	Reliability downgraded
21 August 1856	4	2	Reliability downgraded
22 August 1856	4	-	No tsunami in the Spanish coast
29 January 1885	0	-	No tsunami in the Spanish coast
18 November 1929	-	No tsunami	Newly assessed
25 November 1941	-	2	Newly included
7 July 1941	-	No tsunami	Newly assessed
9 September 1954	4	4	Unchanged reliability
28 February 1969	4	4	Unchanged reliability
17 July 1969	-	2	Newly included
26 May 1975	4	4	Unchanged reliability
14 August 1978	4	No tsunami	Discarded
10 October 1980	4	4	Unchanged reliability
21 May 2003	-	4	Newly included
27 May 2003	-	No tsunami	Newly assessed
25 January 2016	-	No tsunami	Newly assessed
14 November 2020	-	4	Newly included
18 March 2021	-	No tsunami	Newly assessed
12 August 2021	-	4	Newly included

It should be noted that the previous catalogue (1999), developed as part of the European GITEC-TWO project, covered not only the Spanish coasts but also tsunamis observed or originated along the western Mediterranean coast of Africa. Therefore, the events of 22 August 1856 and 29 January 1885 listed in the previous catalogue are not considered in the revised catalogue (2026) because they fall outside the geographical scope of the present study, which is restricted to tsunamis affecting the Spanish coast.

Regarding the event of 2 November 1755, it is not considered as a separate tsunami event in the revised catalogue because it had already been discarded by previous studies. Baptista and Miranda (2009) considered the event unreliable and discarded it from their catalogue, and it is likewise not included in the European tsunami catalogue of Maramai et al. (2014). In conclusion, no earthquake of sufficient magnitude to generate a tsunami was recorded, and the observations reported at Gibraltar were more likely a continuation of the tsunami generated by the 1 November earthquake than evidence of a separate tsunami event.

Taking this revision into account, together with Specific Comment 3, we considered it appropriate to further revise the paragraph in the General Discussion and Conclusions section, which now reads as follows:

“Among the events listed above, the following have been added compared to the previous Catalogue of tsunamis on the Spanish coast and western Mediterranean African coasts by the IGN (Carreño et al., 1999): 22 September 1522, 31 March 1761, 25 November 1941, 17 July 1969, 21 May 2003, 14 November 2020 and 12 August 2021.

The list of discarded tsunamis includes 13 events that were previously considered reliable in different tsunami compilations. Their removal from the catalogue is based on the assigned reliability index, following the criteria established by Tinti et al. (2004). In most cases, a reliability index of “No tsunami” results from the lack of coeval documentary accounts or clear tsunami evidence. Of the 13 events now discarded, 6 were included in the previously published IGN catalogue: 218 (216) B.C., 213 (210, 209) B.C., 63 (60) B.C., 26 May (10 June) 881, 5 May 1706 and 14 August 1978. The latter two are the most noteworthy, as they had previously been considered as probable and definite tsunamis, respectively.

In addition, as discussed throughout the manuscript, the reliability of the 16 November 1755 event is downgraded from questionable to improbable, while the reliability of the 31 January 1756 event remains unchanged at improbable. Given the very low probability of these events having occurred as tsunamis, they are not retained in the catalogue.”

6. Event of 17 July 1969

The unidentified source of the 17 July 1969 tsunami deserves a slightly expanded discussion. Addressing possible source regions and the remaining open questions could further enhance the manuscript and provide useful guidance for future research.

We agree that the 17 July 1969 tsunami would benefit from a more detailed discussion; however, our review of the available historical and scientific literature did not identify additional studies providing further constraints on its source region or generation mechanism beyond the evidence already discussed in the manuscript, which suggests a source southwest of the Iberian margin. We therefore considered that expanding this discussion without additional supporting evidence could lead to unnecessary speculation. Nevertheless, we welcome suggestions of relevant studies that may help constrain the source region or address the remaining open questions surrounding this event, so that we can incorporate and discuss them appropriately.

7. Paleotsunami section

The authors may consider clarifying more explicitly at the beginning of the paleotsunami section that geological evidence is presented primarily for contextual purposes and is not used in the reliability assessment applied to the catalogue. The authors may consider streamlining this section unless a clearer connection with the objectives of the manuscript can be established.

We thank the reviewer for this valuable suggestion. We have revised the manuscript to clarify the role of geological and archaeological evidence in relation to the catalogue. Accordingly, lines 78–92 have been revised as follows:

"Finally, geological and archaeological evidence can complement historically documented tsunami records and extend the temporal record of tsunami occurrence to include paleotsunamis, i.e., tsunamis that predate the historical record or for which no written observations are available. Geological evidence of past tsunami activity may include displaced boulders of exceptional size, tsunami washover fans or gravel deposits, remains of open-sea marine fauna, and characteristic features in coastal stratigraphic records, such as basal erosional unconformities and abrupt increases in grain size, rip-up clasts and mud caps, and coarsening-upward sequences and thinning inland (e.g., Gracia et al., 2010; Rodríguez Vidal, 2016; de Martini et al., 2021; Costa et al., 2022). These indicators contribute to the identification and dating of past tsunami events (e.g., Rodríguez Vidal, 2016; Silva et al., 2023). However, geological evidence cannot always be unambiguously attributed to tsunamis, as similar features may result from other high-energy events, particularly storms, while the dating of geological observations may be subject to substantial uncertainty, especially for prehistoric events, with age ranges sometimes spanning hundreds of years (e.g., Kortekaas and Dawson, 2007; Lario et al., 2011; Costa et al., 2022). Archaeological evidence, such as material remains and ancient buildings, can likewise provide valuable contextual information for identifying past tsunami events and constraining their chronology (e.g., Rodríguez-Ramírez et al., 2016; Reicherter et al., 2022; Silva et al., 2023)."

We have added the following note at the end of the Methods section:

"Importantly, geological and archaeological evidence is included as complementary information for each event. However, this evidence is not considered in the reliability assessment described above."

And we have streamlined the Paleotsunami section and focused the discussion on aspects that are relevant to the interpretation of the catalogue:

"Paleotsunamis are a fundamental source of information for reconstructing tsunami history beyond the historical and instrumental record. Their main value lies in extending the temporal record of tsunami occurrence, particularly because large tsunamis may have long recurrence intervals that are difficult to capture within the relatively short historical and instrumental records. Geological and archaeological evidence can help identify such events, providing indications of tsunami occurrence prior to the availability of direct observations or historical documentation.

However, distinguishing paleotsunami evidence from that produced by other extreme coastal processes can be challenging, while dating uncertainties may span decades to centuries (e.g., Kortekaas and Dawson, 2007; Lario et al., 2011; Costa et al., 2022). Consequently, this evidence cannot be assessed using the same reliability criteria applied to historically documented tsunamis. For this reason, the study of paleotsunamis is beyond the scope of this work.

Nevertheless, previous studies have documented the occurrence of past extreme wave events (EWEs), including events interpreted as paleotsunamis and severe storms, along the southwestern coast of the Iberian Peninsula (Costa and Andrade, 2020; Costa et al., 2022, and references therein), the coasts of Murcia (Lario et al., 2017), Castellón (Roig-Munar et al., 2018b), and the Balearic Islands (Roig-Munar et al., 2023), among others."

8. General discussion and conclusions

The Discussion already acknowledges several important limitations of the catalogue throughout the text (e.g. documentary incompleteness, scarcity of contemporary sources, uncertainty in historical wave-height estimates, and reduced detectability of small historical tsunamis). However, these points are presented in a rather dispersed manner.

The Discussion would benefit from a more explicit synthesis of these limitations, including the progressive decrease in catalogue completeness with increasing age of the historical record and, where appropriate, potential geographical biases in the available documentary evidence.

In addition, the authors may wish to discuss more explicitly the implications of the revised catalogue for tsunami hazard and risk assessments, including supporting probabilistic tsunami hazard assessment.

As requested, we have expanded the General Discussion and Conclusions by adding the following paragraph after line 865:

"The apparent frequency of tsunamis increases through time, with the catalogue containing 1, 1, 3, 2, and 6 events across the 16th to 20th centuries, and 3 events during the first quarter of the 21st century. This pattern likely reflects the progressive improvement in historical documentation and, more recently, the availability of instrumental observations. This also means that the absence of an event from the catalogue cannot be interpreted uniformly across the entire historical period. In particular, the lack of reliable information on tsunamis thought to have occurred before 1500 should not be taken as evidence that no tsunamis actually occurred during this period. The spatial distribution of observations may also be influenced by the uneven availability and preservation of historical records along the coast, as is the case in the Canary Islands, where coastal areas had a low population density before the second half of the 20th century (Galindo et al., 2021). These factors should be considered when interpreting both the temporal and spatial distribution of the events included in the catalogue, as they may affect the assessment of the tsunami potential of a region and the extent to which coastal areas are subject to tsunami hazard and risk."

Technical Corrections

1. In the Introduction, the statement that the 1755 tsunami reached wave heights exceeding 10 m in the Gulf of Cádiz would benefit from a supporting reference.

   The supporting reference for the wave height is the same as that used for the casualty estimates: Martínez Solares (2001).

   The paragraph has been rephrased to address this correction together with Correction 2 under Technical corrections and Comment 1 under Specific comments. Please see our response to Technical Correction 2.

2. In the introduction, the statement indicating that historical records document "at least one deadly and damaging tsunami" may be reconsidered, as it could appear somewhat inconsistent with the manuscript presenting a catalogue of 16 tsunami events. A wording that better reflects the broader historical record may improve consistency.

   The paragraph has been rephrased to address this correction together with Correction 1 under Technical corrections and Comment 1 under Specific comments:

   "Throughout history (1610 BC to AD 2023), over 2,600 tsunamis have been reported worldwide (NGDC/WDS, 2026), resulting in a total of 264 confirmed fatal events and more than 544,000 known deaths (UNESCO/IOC-NOAA, 2023). While tsunamis are infrequent along the Spanish coast, historical records document 16 reliable events, including the destructive tsunami generated by the 1 November 1755 earthquake southwest of the Iberian Peninsula. This event mainly affected the Portuguese, Spanish, and Moroccan coasts, with wave heights exceeding 10 m in the Gulf of Cadiz and more than one thousand estimated fatalities in Spain (Martínez Solares, 2001). Although rare, such events demonstrate that tsunamis can have severe consequences along the Spanish coast.

   Therefore, a comprehensive and reliable catalogue of historical tsunami occurrences and impacts is fundamental for tsunami hazard and risk assessments, including the calibration of numerical tsunami simulations and the estimation of potential impacts. It also serves as a valuable resource for tsunami preparedness, emergency planning, and coastal risk management. In addition, documenting past tsunami events contributes to public education and awareness, improving the understanding of tsunami hazards among coastal communities, strengthening coastal resilience, and supporting informed decision-making. "

3. The final two paragraphs of the Introduction could be streamlined to reduce some repetition and improve the transition between the description of the study objectives and the outline of the manuscript structure.

   We agree with the reviewer's suggestion and have restructured the final paragraphs of the Introduction as follows:

   "In this study, we review historical accounts and marigrams to validate tsunami events previously attributed to the Spanish coast and to investigate evidence of tsunamis following large earthquakes in the region. For each event, we provide a detailed description based on the compiled information and assign a reliability index following the classification criteria proposed by Tinti et al. (2004). Available tsunami measurements are incorporated into these descriptions, while findings from geological and archaeological studies are included

as complementary evidence when available but are not considered in the reliability assessment. The structure of the catalogue and the indicators used to evaluate the reliability of each event are described in the methodology section.

The catalogue includes 16 reliable tsunami events, classified as either questionable or definite, and is publicly available at https://doi.org/10.7419/162.04.2023. In addition, we describe two events classified as very improbable and discuss 13 previously reported tsunamis that, based on the evidence reviewed, are classified as "No tsunami" and are therefore discarded from the catalogue.

We discuss the implications of these findings, contributing to a broader understanding of historical tsunami activity along the Spanish coast. The catalogue serves as a foundation for future research and is subject to updates as new information and evidence become available."

The manuscript refers to an interactive map viewer associated with the catalogue (Section 4 and Figure 6). The authors may wish to provide the direct link to the viewer, in addition to the general catalogue URL, to facilitate access for readers.

The direct link to the interactive map viewer (https://visualizadores.ign.es/tsunamis) has been added to Section 4 to facilitate access for readers:

"Additionally, an interactive map viewer (https://visualizadores.ign.es/tsunamis) displays the locations of tsunami sources and the localities affected by each event (Fig. 6)."

4. Figure 6 appears to show 15 tsunamigenic source locations, whereas Table 2 contains 16 catalogue events. The authors may wish to verify that all catalogue entries are represented in Figure 6 or clarify the caption if there is another reason.

Thank you for pointing out this issue. The reason why Figure 6 shows 15 tsunamigenic source locations instead of the 16 catalogue events listed in Table 2 is that the source of the 12 August 2021 tsunami lies outside the geographical extent of the figure. This event was generated by an earthquake in the South Sandwich Islands, whose source location is beyond the area covered by Figure 6, although the tsunami is included in the catalogue because it was recorded along the Spanish coast. To avoid confusion, we have clarified this in the figure caption.

"Figure 6. Geographical distribution of tsunamigenic sources from the Catalogue of tsunamis on the Spanish coast. The source location of the 12 August 2021 South Sandwich Islands tsunami lies outside the geographical extent represented in the figure."

In addition, the source location of the 17 July 1969 event is listed as unknown in Table 2, although the event appears to be represented in Figure 6. Clarification on this point would be appreciated.

Thank you for pointing out this issue. The source location of the 17 July 1969 tsunami is indeed unknown, as no significant earthquake or other cause has been identified that can be correlated with the event. However, the geographical distribution of the tide-gauge records from the Azores, Portugal, and the Canary Islands suggests that the tsunami source was located southwest of the Iberian margin. Based on this spatial distribution, Figure 6 represents an approximate source region using a dashed circle, as indicated in the legend.

The apparent inconsistency may stem from the fact that the online catalogue and map viewer currently provide coordinates for the point represented in Figure 6. However, these coordinates were included erroneously and should not be interpreted as the actual source location of the 17 July 1969 tsunami. We have corrected this in the catalogue and map viewer by replacing the coordinates with "?" to indicate that the exact source location is unknown.

Also, to make this clearer in Figure 6, we have added the following note to the caption:

"Figure 6. Geographical distribution of tsunamigenic sources from the Catalogue of tsunamis on the Spanish coast. The source location of the 12 August 2021 South Sandwich Islands tsunami lies outside the geographical extent represented in the figure. The dashed circle indicates the hypothetical source region of the 17 July 1969 tsunami, for which the exact source location remains unknown."

5. The manuscript states that the revised catalogue contains 16 tsunami events, consistent with Table 2. However, the interactive catalogue viewer appears to display fewer events. The authors may wish to verify the consistency between the published catalogue, the interactive viewer, and Figure 6, and clarify any differences if intentional.

   The apparent discrepancy arises because the current online catalogue and interactive viewer still correspond to a previous version of the catalogue from 2023. The online catalogue has now been updated with the revised version, which contains the 16 tsunami events described in the manuscript and listed in Table 2. The PDF version of this revised catalogue is also published under the DOI: 10.7419/162.32.2026. The interactive viewer, however, has not yet been updated with the revised information. This update is currently being implemented.

6. The manuscript is generally written in clear and fluent English. The authors may nevertheless wish to perform a final proofreading of the revised version to further improve readability and language flow prior to publication.

   We thank the reviewer for this positive assessment of the manuscript. During the revision of the manuscript, we have made further adjustments where appropriate to improve the clarity and readability of the text. We will remain attentive to any specific language-related comments that may arise during the review process.