

R1: lines refer to the original manuscript	Authors: lines refer to the updated version of the manuscript
Abstract	
Line 20: “we dug some paleoseismological trenches”. Consider specifying the number of trenches or using a less vague expression than “some”.	Replaced “some” with “four”.
Line 24: “These data provide new important seismotectonic hints, which have to be considered”. The term "hints" is not appropriate in this context. Please rephrase. I would also recommend avoiding the word "hints" in the manuscript title.	Replaced with “insights” and modified the title.
Introduction General comment: The scientific problem is clearly introduced and supported by adequate references. However, it would be helpful to include a reference to Fig. 1 within the introduction to facilitate spatial orientation from the beginning.	We moved Fig. 1 to the Introduction paragraph and included reference to Fig.1 at the beginning of the Introduction paragraph.
Lines 34–35: Use the abbreviation ESA since it has already been defined. Also check comma placement.	OK
Line 40: The word “some” seems unnecessary in this sentence and can likely be removed.	ok
Line 48: Again, the full expression for ESA is used despite previous definition. Please use abbreviations consistently throughout the manuscript.	OK
Line 50: Please define the abbreviation ELF.	We modified the sentence to: “on the bases of the reflection seismic lines acquired by ELF Aquitaine and...”
Line 51: Should "piedmont" be capitalized?	It should not be capitalized, as it is a geomorphological adjective.
Line 56: The wording “seismogenetic attention” is unclear. Please rephrase.	Modified with: “Barba et al. (2013) and Anderlini et al. (2020) focused on the Bassano Valdobbiadene Thrust, reporting for this tectonic structure a seismogenic potential greater than the Montello one”
Line 60: Again, avoid the vague term “some” and specify the number of trenches.	Replaced with “four”
Lines 66–67: Please use the abbreviation VVV, which was already defined. Apply the same correction throughout the manuscript.	OK
Line 68: “Our data strongly improve the seismic hazard assessment.” The data themselves do not improve hazard assessment, but rather provide information that enables improved assessments. Please rephrase.	Modified as follows (lines 63-64): “Our data provide important information that enables to strongly improve the seismic hazard assessment of this sector of the Southalpine region”

Seismotectonic setting	
Line 111: Spell out "Last Glacial Maximum" and define LGM here, since this is the first occurrence.	ok
Line 126: Replace “for creeping” with “by creeping”.	Ok, done.
Methods	
Line 163: “we used a multidisciplinary approach to realize the present seismotectonic study.” Please rephrase, for example: “ <i>we used a multidisciplinary approach for the seismotectonic investigation.</i> ”	Ok, we modified the sentence as suggested.
Line 166: The word “gently” does not appear appropriate in this context.	We replaced with “provided by”.
Lines 167–174: Please report the electrode spacing and approximate depth of investigation of the ERT surveys.	Done
Line 177: Remove “some”.	OK
Line 182: Please specify the dated material (charcoal, plant remains, bulk sediment, etc.).	We added “of charcoal and bulk sediment”
Quaternary evolution of the study area	
Line 200: Use only the abbreviation LGM after it has been defined.	ok
Line 212: Consider rephrasing. For example, replace “we can remember” with “it is worth noting”.	Ok, modified the sentence as follows (lines 216-217): “A remarkable example is the colossal Fadalto landslide, which occurred approximately 15 ka ago (Pellegrini and Surian, 1996)”.
Line 213: The term "over-deepened basins" may be more appropriate.	Ok, replaced the term.
Morphotectonic hints of recent tectonic activity of the Valdobbiadene-Vittorio Veneto Thrust	
Line 217: Replace "hints" with a more precise term, such as "indicators".	OK, done.
Lines 219–220: The DEM analysis has already been described in the Methods section and does not need repetition.	We summarized the sentence as follows (lines 254-255): “The morphological anomalies identified through DEM analysis and potentially related to tectonic activity were subsequently validated by field survey”.
Lines 222–223: I do not clearly recognize the described pattern of water gaps in Fig. 3. Please clarify the wording or indicate the relevant features more clearly in the figure.	We modified the wording, replacing with “incised riverbeds” as the features are classified on the map of Fig. 3.
Paleoseismological trenching	
General comment: From Fig. 3, I infer that trench sites were preferentially selected on Holocene	We added a sentence in the methodology paragraph explaining why we preferred sites with Holocene deposits for trenching (lines 160-164): “Because

surfaces while LGM surfaces were avoided. Out of scientific curiosity, could the authors explain this choice? LGM surfaces might preserve longer paleoseismic records and potentially more cumulative deformation.	one of the main objectives of this study was to identify the most recent surface-faulting event for seismic microzonation purposes, trench sites were preferentially selected on Holocene deposits. These deposits provide sufficient stratigraphic resolution to distinguish individual paleoearthquakes, whereas the coarse-grained LGM gravels mainly preserve cumulative deformation, hampering the discrimination of successive faulting events.”
Lines 243–244: The northward tilting is interesting. Could it have an origin other than tectonic deformation, for example depositional inclination of gravel bars in a braided river environment?	As this is a Holocene distal alluvial-fan deposit incised into the LGM terrace, the interpretation in terms of depositional bars is difficult to support. It is more reasonable to interpret the upstream dip of the gravels as being related to tectonic tilting. We agree that the term “innermost” may be misleading and could be replaced with “distal.” We have therefore modified the sentence as follows (lines 247-248): “In the distal portion of the Holocene alluvial fan, incised within the LGM fan, gravels are...”
Lines 247–248: Please briefly describe the geophysical anomaly.	We added this sentence to describe the geophysical anomaly (lines 253-254): “that shows an abrupt lateral contact between a low resistivity body uphill and a medium resistivity body downhill”. We also add a file in the supplementary material (S1) collecting high-resolution images of ERT.
Line 278: Replace “across” with “cross”.	ok
Line 313: Correlated to which coseismic event? Or did you mean “related”?	Yes, “related”.
Line 338: Correct FO1 to F1.	ok
Lines 343–345: Is the morphological scarp truly a fault scarp, as indicated in Fig. 11? Given its approximately 2 km length following the valley, a fluvial origin (e.g., terrace riser or erosional scarp) should also be considered. Furthermore, the 2 m scarp height appears difficult to reconcile with the roughly 20 cm displacement observed in the trench.	The scarp may not be entirely tectonic. In addition to considering the possible role of fluvial erosion, we already hypothesize that, at the trench site, the scarp has been modified by human intervention (e.g., terracing and road construction). Therefore, the measured elevation difference should not be considered entirely tectonic in origin. We added a part of the text explaining this aspect (lines 409-411): “Considering deformation, the morphological scarp associated with the fault trace (Fig. 12) is greater than the cumulative displacement documented in the trench, suggesting that post-seismic geomorphic evolution and/or anthropogenic modification may have contributed to its current morphology.”
Line 361: By “sharp gravels”, do you mean angular gravels?	Yes.
Line 416: Please briefly describe the ERT anomaly.	We added this sentence to describe the geophysical anomaly (lines 430-431): “...showing the abrupt contact between a medium resistivity body separating two portions of the surficial low resistivity body”.

Line 426: Replace "sedimented" with "deposited".	ok
Lines 429–430: As in previous trench descriptions, a photograph highlighting the fault plane would be beneficial.	We added a Fig. 20 showing a detail of the fault plane.
Discussion	
Lines 441–458: This information appears more appropriate for the Seismotectonic setting section. Much of it is already presented there. Consider moving or integrating this material.	As suggested by both the reviewers we have removed this part of the text from the Discussion.
Lines 482–483: It may be worth considering whether the event interpreted as E2 in both the Miane 3 and Follina 1 trenches could instead represent two distinct earthquake events.	We added a sentence in the text to evaluate this hypothesis (lines 483–485): “The possibility that F2 and M2 represent two distinct events cannot be excluded; however, the available data are currently insufficient to support this interpretation”.
Line 494: Can uncertainty estimates be provided for ADs and ADt?	The ADs and ADt values reported in the manuscript represent the mean values of the displacements measured at the two sites. Specifically, ADt = 0.27 is the mean of the values measured at Cison1 (0.21) and Follina1 (0.32), whereas ADs = 0.49 is the mean of 0.29 and 0.69. We included the uncertainty range in parentheses both in the text and in table 5. Regarding the magnitude values, although the uncertainty becomes apparent at the second decimal place, we consider the first decimal place sufficient for magnitude estimates derived from empirical relationships, given that the available information does not support a reliable estimate to the second decimal place.
Line 509: I did not receive Supplementary Material S5 for review. Please check that it has been included.	Thank you for pointing this out. There is no Supplementary Material 5 in the current version of the manuscript. The reference was left in the text from a previous version and has now been removed.
Line 528: Please explain the concept of “lost earthquakes” for readers unfamiliar with the term.	We added part of the text explaining the concept of lost earthquakes (lines 537–544): The concept of “lost earthquakes” (Stucchi et al., 2004) highlights the difficulties related to the reconstruction of historical seismicity and to the assessment of earthquake catalogue completeness. The absence of a historical earthquake from documentary records does not necessarily imply that the event did not occur, but may instead result from gaps in the production, preservation, or interpretation of historical sources. Therefore, catalogue completeness cannot be assessed solely through statistical approaches, but requires a critical evaluation of the historical and archival context in which seismic information was generated and transmitted. This issue is particularly relevant for poorly documented regions and for tectonic structures lacking clear historical seismicity, where apparent periods of seismic quiescence may partly

	reflect documentary gaps rather than the absence of past earthquakes.” We also added some details in the conclusions paragraph (see next comment).
Conclusions	
Line 552: Consider rephrasing the final sentence to more clearly explain the meaning of “lost earthquakes”.	We modified the sentence as follows (lines 566-568): “...numerous “lost” earthquakes affecting the Italian seismic record prior to the 15th century, whose absence from historical catalogues may reflect gaps in documentary evidence rather than the absence of seismic activity”.
Figures	
Figure 1: Mark the location of Fig. 2.	ok
Figure 2: Indicate stream flow directions and the location of Fig. 3.	Done
Figure 3: Indicate stream flow directions. The legend appears to contain two symbols for LGM alluvial fan deposits. Please check whether one should represent a different unit. The fault-zone depiction using a transparent broad band is excellent and particularly effective for communicating fault-zone uncertainty and width. Mark the locations of Figs. 4, 8, 11, and 17.	Ok, done.
Figure 9: The caption refers to blue squares and red triangles representing plastics and bricks, but these symbols are not visible.	The updated Fig.9 includes samples, bricks and plastic.
Tables	
Tables 1–4: Different calibration curves appear to have been used. For consistency and comparability, I recommend recalibrating all radiocarbon dates using the latest calibration curve and updating the manuscript accordingly.	The samples were recalibrated using the online version of OxCal and the IntCal20 calibration curve to ensure consistency across the dataset. We have therefore added a section to the Methods describing the calibration procedure in detail (lines 178-181): “To ensure consistency across the dataset, radiocarbon ages originally calibrated by Beta Analytic using IntCal13 were recalibrated based on the original conventional radiocarbon ages using IntCal20 in the online version of OxCal v4.4 (Bronk Ramsey, 2021)”.
	Tables and captions were updated accordingly.
Table 5: Please provide uncertainty estimates for ADt, ADs, and the corresponding Mw values.	See previous comment on uncertainty values of ADt, ADs and corresponding Mw values.