

We would like to express our sincere gratitude to the reviewer for dedicating their time to reviewing our paper and providing us with valuable feedback. We have taken the reviewer's comments and suggestions into careful consideration, and we are committed to addressing them in a thorough manner.

1. On the use of “coseismic” terminology: We opted to remove all notion that the optical correlation and field measurements directly indicate the coseismic slip, instead, we referred to these as either “total slip” or “ground displacements”, wherever applicable in-text. The suggestion to take the difference of the field and optical measurements with InSAR were incorporated to better constrain the coseismic slip.
2. For the methodology section, we further detailed the description of the regression limits and improved upon the original discussion of the calculation process as suggested.

Detailed responses:

Line 4: Done.

Line 6: Provided the rupture length estimates.

Line 7: Removed “unusually”.

Line 33: Thank you for pointing it out. We excluded this statement.

Line 43: Thank you for the suggestion. We limited all implications in line with this.

Line 118: Dates are added in parenthesis.

Line 154: ROI has been defined previously in Figure 1c.

Line 212: Specific details included.

Line 258: As much as we wanted to use Planet images taken day/s apart, the availability and workability of the available images prevented us from doing so. From our testing, the outputs that we presented are the ones that produced the best results. The range of the “short” and “annual” pairs were defined in Section 3.2, however, we modified this sentence to reiterate.

Fig 4: Thank you. The captions are updated.

Line 276: Calculation of the uncertainties were originally described in the methods section, which we further expounded upon in this revision. The across-fault profiles were also further discussed in the methods.

Line 280: The section heading was modified.

Line 286: Done.

Fig 6: The uncertainties are clipped to 0.

Line 329: The swath dimensions were already in the methods section along with the computation of uncertainties. We included more details on the profiling process and uncertainty calculation.

Line 353: The exact dates were already stated multiple times throughout the text, we modified this sentence to reiterate the dates.

Line 361: The observations were acquired by our team. Clarifying nouns were added.

Fig 11: Done.

Line 392: Done.

Line 407: Thank you. The sentence is modified for clarity.

Line 413: Further details provided in the calculations of uncertainties.

Line 439: This first paragraph was moved to a separate subsection to discuss the coseismic slip by subtraction.

Line 441: This phrase is removed upon the discussion of coseismic slip by subtraction.

Line 442: All notion of pure coseismic slip from optical correlation and coseismic slip has been removed, instead, we simply referred to them as ground displacement.

Line 449: This was generalized to “our measurements”.

Fig 12: Another panel was added to show the residuals along with the moving mean curves from the other measurements. The added panel plots everything in a single axis.

Line 450: The observations of Reitmann et al, 2022 were modelled in a theoretical Southern California environment, which is highly different to that of Masbate in terms of climate, bedrock lithology, among other factors. Furthermore, their models span hundreds to a thousand years, which is much larger compared to the two-year interval we have in the paper. We realize that a separate modelling may be needed to properly describe the long-term slip variability in different areas, hence, we opted to say that the ruptures may have been modified by surface processes throughout that time period instead of slip distribution smoothing.

Line 468: Thank you for the suggestion. This was modified.

Line 472: There were 3 different moment tensor solutions at the time of data collection. 'Centroid' refers to the surface projection of the centroid from Global CMT as we prefer this location over the two other source estimates since it agrees with the acquired slip distribution plots.

Line 472: The sentence is revised.

Line 476: This is actually in accordance with interpretations discussed in a latter section. Cross-reference is provided for clarity.

Line 485: Done.

Line 501: Done.

Line 516: This refers to the interseismic creep. We added specifications for clarity.

Line 586: Values are modified in line with the new coseismic slip calculation.

Line 594: Similar to Line 450, we opted to use "influence the slip distribution" to imply an inference rather than a definitive reason.

Line 612: We limited the implications in line with the suggestions.