

Dear Editor,

We want to thank you for your comments.

We addressed the points highlighted and provide here a point-by-point response.

Furthermore, we provide a track-changes version of the manuscript and a version with changes incorporated.

Best regards

Daniele Cirillo on behalf of the co-authors.

- Line 31: there are so many other seismotectonic studies that use subsurface and field data to reconstruct 3D fault geometry, as the recent papers by Barchi et al., 2021, Ross et al., 2020 and Porreca et al., 2020.

Done

- Line 32: remove “;” SCEC, 2021

Done

- Line 53: “at depth”

Done

- Line 64: you should cite also other groups working on seismotectonic studies: Sato et al., 1998 Kobe; Bonini et al. 2014 Emilia; Gracia et al., 2019 Morocco; Barchi et al., 2021; Porreca et al., 2018 Vettore.

Thanks, we added them

- Line 66: “,” after the parenthesis

Done

- Line 68: you state: “In the sector”, but it is not clear which sector. Please specify it better.

Done

- Line 69: please delete “time interval”

Done

- Fig. 1b. Replace “Lucania” with “Basilicata”. I think Basilicata is more currently used than Lucania.

Done

- Lines 111-112: refer also to the group of Mattei et al., 2007; Cifelli et al., 2007

Done

- Line 220: delete the space before the “)”

Done

- figure 4 is too small: it is difficult to distinguish the color of the events. Please, try to arrange the figure in a square with 4 panels.

we have modified the figure as suggested

- Line 259: what is F5?

Thanks, we specified it in the main text

- Line 260: “and ii) to favor”

Done

- Fig. 5: The principal stress data are reported in (b) as dip and azimuth (opposite with respect to (a)). Sigma-1 in (b) has not the same value as reported in the Table c. Please check all the data.

we have modified as suggested

- Line 351: please add references after “since Middle Pleistocene”

Done

- Line 365: replace “lengthened” with “oriented”

Done

- Line 367: if Cluster 1 started in 2011, why do you state that it lasted “for the entire 2010-2014 seismic activity”?

Thanks for pointing out this issue. It was a typos.

- Line 387: replace with “The obtained 3DFM”

Done

- Line 427: the extension of the Apennine chain is quantitatively assessed not only by borehole data but also from geodetic data. Please add some references (e.g. D’Agostino et al., 2001).

Done