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# Comment on se-2021-29

M.ELIANA POLI (Referee)

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Referee comment on "Geodynamic and seismotectonic model of a long-lived transverse structure: The Schio-Vicenza Fault System (NE Italy)" by Dario Zampieri et al., Solid Earth Discuss., https://doi.org/10.5194/se-2021-29-RC2, 2021

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Review report by M. Eliana Poli for manuscript "Geodynamic and seismotectonic model of a long-lived transverse structure: The Schio-Vicenza Fault System (NE Italy)" by D. Zampieri, P. Vannoli, P. Burrato.
Solid Earth (se_2021_29).

The manuscript focuses on the deformative history of the Schio-Vicenza fault-system, one of the most complex transverse structure that separates the eastern Southalpine chain and its foreland, from the Lessinean block (i.e. the weakly deformed Apennine foreland).
The work is well organized and represents an important contribution in order to understand the seismotectonic of the Southern Alps. English language is always appropriate.
After a wide and thought analysis of the previous works, the Authors deepen the historical and instrumental seismicity of the area under examination.
The Authors collected all the available geological, geophysical, morphological data in order to devise a detailed kinematic picture of the tectonic evolution of the SVF, clearly highlighting the main problems of interpretation.
The new proposed kinematic model resolves the apparent interpretative discrepancies but, in my opinion, the Authors do not discuss adequately the consistence between the new structural model and the present geodynamic setting of the eastern Southern Alps (i.e. the present indentation and counterclockwise rotation of Adria). In other words: is the proposed "opening zipper model" consistent with the kinematic setting of the Southalpine indenter? (for details see the attached file).
Figures: in the present form, they are not always easily legible. Please, when possible, enlarge them (see the attached pdf).
In short, the work is certainly an excellent starting point for every tectonic study of the Southern Alps and I recommend the publication on Solid Earth but after some minor revisions.
Accurate observations in the .pdf attached file.

Best regards
Maria Eliana Poli

Please also note the supplement to this comment:
https://se.copernicus.org/preprints/se-2021-29/se-2021-29-RC2-supplement.pdf