

Interactive comment on “Geometry of the Turkey-Arabia and Africa-Arabia plate boundaries in the latest Miocene to Mid-Pliocene: the role of the Malatya-Ovacık Fault Zone in eastern Turkey” by R. Westaway et al.

Anonymous Referee #1

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The manuscript discusses an interesting problem — the relations between the Eurasian, Turkish, Arabian and African plates — the presentation is restricted to the detailed discussion of a relatively small area.

It seems necessary to introduce the description of this crucial area in a larger scale. We need a presentation of the present-day field of displacement (there is some information available from GPS data, see McKlusky et al., 2000, or Vernant et al., 2004)

A discussion of the kinematic evolution at large scale, including a review of the strain

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and stress field variations in the frame of the Arabian plate, is also needed (see Peritethys program, Matar and Mascle, 1993, Salel and Seguret, 1994, Altsdorf et al., 1995; Litak et al., 1997).

A correct, even short, discussion of these larger-scale data will help us to understand better the interest of this small area.

Also, the final discussion should emphasize what are the new constraints provided by the author's work for the general geodynamic evolution of the area.

The figures are very difficult to read. The important elements are lost in a crowd of place names which are not necessary for the understanding of the structure. I suggest to cancel all those which are not used in the text. On the contrary, some places that are important for the comprehension of the text, are reduced to their initials (AM, CR, LM). With these difficulties it becomes almost impossible to read the figures.

A new figure will be useful. At the end of the paragraph entitled "Relationship to the earlier phase of deformation", the sentence "Finally, if one restores the 35 km of SW translocation. . .", needs to be illustrated by a figure.

The bibliography shows a tendency to self quotation. More diverse references should be added, starting perhaps with those listed above.

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