

Interactive comment on “Tectonostratigraphy of the Mérida Massif reveals a new suture zone exposure in SW Iberia” by Rubén Díez Fernández et al.

Manuel Francisco Pereira (Referee)

mpereira@uevora.pt

Received and published: 20 January 2020

This manuscript by Díez-Fernández and co-authors presents a significant dataset obtained from geological (structural) mapping surveys developed in a complex region of the Iberian Variscan belt located in Ossa-Morena/Central Iberian zones boundary. Based on the results obtained, the authors reinterpret the region's structure by defining different tectonostratigraphic units with continental or oceanic affinity. Structural interpretation is plausible and well supported by structural data. My comment is focused on the mafic-ultrabasic rocks of Mérida. I consider that the quality of the discussion could be improved by addressing the following topics: i) It will be useful to confront argu-

C1

ments that consider the mafic-ultrabasic rocks of Mérida as representing a Cadomian island-arc (Bandrés et al., 2002, 2004), instead of oceanic lithosphere (i.e. ophiolite) as you proposed (this study); ii) It will be possible to discuss if the Ediacaran Calzadilla ophiolite (Arenas et al., 2018) and the one now proposed by Díez-Fernández and co-authors (this study), are related in terms of their formation and emplacement; iii) It will be important to clarify whether garnet from the Mérida mafic-ultramafic rocks represent porphyroblasts or/and porphyroclasts, i.e., they grew or not with metamorphism and deformation; this has implications for the interpretation of the Sm-Nd dating obtained on garnet;

Interactive comment on Solid Earth Discuss., <https://doi.org/10.5194/se-2019-189>, 2020.

C2