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Interactive comment

Interactive comment on "Resolving uncertainties in the application of zircon Th/U and CL gauges to interpret U-Pb ages: a case study of eclogites in polymetamorphic terranes of NW Iberia" by Pedro Castiñeiras et al.

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Interactive comment on "Resolving uncertainties in the application of zircon Th / U and CL gauges to interpret U-Pb ages: a case study of eclogites in polymetamorphic terranes of NW Iberia" by Pedro Castiñeiras et al.

Reply to: Antonio Langone (RC#2) Received and published: 8 June 2020

We sincerely acknowledge the constructive comments and review made by Antonio Langone. Most of the suggested corrections in the annotated PDF are reasonable and



Discussion paper



we truly appreciate them. We will modify the final manuscript accordingly in order to build an improved version of the paper.

About the general comments we agree to better separate methods and data. As included in the reply to RC#1 more details on the petrography and microstructures will be included in the new version of the manuscript. We will include and discuss new and very interesting references suggested by the referee, thank you very much. They will help us to improve both introduction and general discussion. We agree our suggestion is not original, but it is not yet such a common practice in regional geology. We present an example in an area where, with the application of this methodology, many questions remain unanswered!

We will review and enlarge the Variscan eclogite geochronology database in the manuscript, improving the discussion, as suggested by the referee.

Some replies to specific comments: L54-56: Nice recommendations, we will consider them. L83: OK L147: Yes, we measured it. In the table we only report the minimum amount of data necessary to plot the data yourself and make some basic calculations. But we can easily include the 208/232 ratios and ages. L159: Yes, we will specify the type of age used. L247: OK L248: OK L539 and Fig. 3B: OK, we can include all the data in the graph.

Interactive comment on Solid Earth Discuss., https://doi.org/10.5194/se-2020-53, 2020.

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