Manuscript: egusphere-2023-1389 2nd Report

I thank the authors for addressing the comments provided in the first round of the revision process, improving the manuscript quality and clarity as well.

I would like to iterate with minor comments on some points. I favor the publication of the manuscript, provided that these points are addressed:

- Line 157: Classical terrain correction calculations usually take into account all the topographic masses within a 166.7 km radius around each gravity observation point (e.g. Zahorec et al. 2021). Is it the same distance used for your terrain calculations? Please, specify if possible.
- Line 231: Please, report the outcome of your sensitivity tests with respect to z0 and density contrast for the Parker-Oldenburg algorithm, and reformulate the sentence. The tests show that the outcome strongly depends on the choice of z0, while the Moho shape is better constrained. Hence, your z0 assumption does not "also correspond with" the Moho depth estimate after Kumar et al. (2012), but you need to assume the Moho depth after Kumar et al. (2012) as z0, to constrain the results of the inversion.
- Line 323: remove "approximately".
- Line 484 and/or Discussion: If I understand correctly, the 30 km depth estimate to the top of a deep dense structure from RAPS, is consistent with the outcome of the Moho 3D inversion above (provided the assumption of z0 after Kumar et al. 2012). However, these two methods are not able to resolve the discontinuity between the mantle below and the crustal underplated layer above, given the weaker density contrast.
 This means that, apart from literature review, the existence of the underplated layer relies only on the outcome of the 2D forward modeling.

Please, either in the discussion or in the conclusion, add a clear sentence on the limitations of this 2D forward modeling approach: the 2D forward modeling shows that the observed gravity data is compatible with the existence of an underplated layer above the Moho, although it cannot quantify the uniqueness of the proposed solution. An inversion framework will be necessary to assess the uniqueness of the solution proposing such a structure.