

***Interactive comment on “The role of Edge-Driven Convection in the generation of volcanism I: a 2D systematic study” by Antonio Manjón-Cabeza Córdoba and Maxim Ballmer***

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Dear Editor, dear authors,

The manuscript deals with the process of Edge-Driven Convection (EDC) and how it can explain intraplate volcanism. Different mantle properties and edge geometries are tested to analyse the amount of volcanisms that can be induced by EDC. The results are compared with Canary Island and Cape Verde. Additionally, it is shown under which conditions EDC is changed into SSC. The authors clearly describe the existing

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literature, their used methods and results. I strongly recommend it for publication and have only minor comments to the authors.

Comments are provided in the supplement.

Kind regards, Lisa Rummel

Please also note the supplement to this comment:

<https://se.copernicus.org/preprints/se-2020-120/se-2020-120-RC2-supplement.pdf>

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Interactive comment on Solid Earth Discuss., <https://doi.org/10.5194/se-2020-120>, 2020.

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