

Topic editor decision: Publish subject to minor revisions (review by editor) by [Johan Lissenberg](#)

A number of comments from Reviewer 2 relate to the feasibility (or otherwise) of the Fuerteventura carbonatites as an economic and exploitable source of REE. In response, the authors write that 'our work is part of a scientific research, focused on the detailed characterization of the mineralogy and geochemistry of these particularly exotic rocks, within a geological context that has received scant attention. Our study does not, in any capacity, aim to conduct an economic assessment of these lithologies for the purposes of a mining project.'

However, as is, the revised manuscript still contains a clear economic geology rationale, and is not entirely framed around understanding REE in ocean island carbonatites, as suggested by the response. For instance, the abstract frames the context as the EU 'actively promoting exploration of REE resources', and states that the paper comprises a 'preliminary evaluation as potential targets for REE exploration'. Similarly, the Introduction talks about the how EU Critical Raw Materials Act 'aim to establish a comprehensive framework to ensure a secure and sustainable supply of CRMs, including REEs, in the coming years'. The title also reflects this ('Rare earth element resources on Fuerteventura').

I would encourage the authors to update the manuscript, particularly the abstract and introduction, clarifying the framework in which they see their work. If the paper is about the Fuerteventura carbonatites as (potentia) REE resources then some of reviewer 2's comments should be addressed; if it's about understanding REE in ocean island carbonatites then the abstract and introduction should reflect that. Please edit the manuscript accordingly.

Dear editor,

We kindly appreciate your comments and considerations. Then, we have attempted to address them through a series of significant modifications, particularly applied to the title, abstract, introduction, and conclusions, as well as minor adjustments in the results and discussion sections. We believe these changes contribute to greater coherence throughout the manuscript and align with the feedback provided by the anonymous reviewer as you suggested.

We hope this revision meets your expectations, and you find our work suitable for publication in Solid Earth.

Sincerely,

Marc Campeny