Point-to-point review:

I am mostly satisfied about the authors' response and revisions. However, the authors' response about FAIR principles and use of community archives show several misunderstandings.

First, the authors argues that the use of relational database as in Isoarch creates some complexity that should be avoided. IsoArcH does not replace, rename or duplicate original sample identifiers as suggested by the authors; original identifiers are preserved, while internal identifiers are generated to structure the database and link metadata across entities (samples, materials, analyses, locations, references). This is standard practice in relational database design adopted by community repositories and is invisible to end users when data are exported or queried in flat formats. I agree with the authors that filling the proper level of information for meeting true FAIR principles for new and compiled isotope data is tedious and time-consuming but it only need to be done once if done properly.

Second, FAIR principles are not just about accessibility of the data. So the issue is not whether the dataset is deposited on Zenodo with a DOI as given as an answer to my FAIR comment. It is clear that this step improves accessibility and preservation. However, putting the data on Zenodo does not meet FAIR principles in terms of interoperability and reusability. FAIR compliance depends on standardized metadata structures, controlled vocabularies, explicit provenance, and machine-readable organization that enables integration across datasets and platforms. Isoarch and Isobank put a lot of work into defining those metadata structure. Other approaches are certainly possible and I encourage the authors to set their own metadata structure as far as they can pass the FAIR guidelines.

A third important point is that human readability and FAIRness are not synonymous. A single spreadsheet may appear intuitive for immediate consultation as the authors state because of limited metadata field, but it does not inherently support interoperability, traceability of data, or computational reuse because of the lack of standardized structure and community define metadata fields. Conversely, relational metadata structures may appear more complex because they explicitly preserve relationships between entities and analytical contexts; this complexity is necessary for reproducible, machine-actionable data integration. This is particularly important for isotope compilations, where analytical methods, sample materials, standards used to calibrate data, instruments used, data treatment, analytical precision, coordinate precision, or preparation protocols vary substantially across studies. While I agree that some of those information are not necessarily available for compiled study they should be made available in the database for new data generated.

At the same time, I would emphasize that my intention is mostly to encourage alignment with evolving community FAIR practices. The question of whether the dataset, in its current form, sufficiently meets FAIR expectations for publication could be left to the editor's discretion. A the authors highlight I have a conflict of interest with IsoArch and Isobank. I find that these initiatives aim to support the isotope community in progressively improving data practices, not to create additional barriers or make people feel that there are gatekeepers. I fully recognize that many existing datasets, including my own past work, have not always met these standards. However, as a field, we are now in a position to move toward more transparent, interoperable, and reusable data practices. My view is that this is important for isotope geochemistry, a field that is way behind others in terms of FAIR principles. So, I would still like to encourage the authors to consider taking steps toward richer and more systematic metadata documentation, clearer provenance tracking, and alignment with interoperable frameworks or community-supported infrastructures.

A: There appears to be a misunderstanding. We do not believe that depositing of the dataset on Zenodo is sufficient to satisfy the FAIR principles. In our response, we also emphasized that the dataset includes useful information for reproducibility purposes, such as coordinates, geological unit, age, $^{87}Sr/^{86}Sr$ value, and related uncertainty. The literature dataset was compiled from existing databases and publications and includes all available information reported in these sources, such as sample names, coordinates, material type, and analytical uncertainties. In our opinion, these elements provide information necessary to meet the FAIR requirements (i.e. decimal coordinates, Sr isotopic ratios, 1σ errors, type of the bedrocks, age of the bedrocks and the corresponding geological codes).

We would also like to emphasize that all information related to the new samples is already reported in the main article, which focuses on the presentation of a new dataset of bioavailable Sr isotopic ratios of plants from southern Brazil.

All material and analytical details are reported in the 'Material and Methods' section (except for the coordinate accuracy) and subsequently debated in the 'Discussion' section, following the approach adopted in other isoscape articles published in ESSD (e.g., Dossetto et al. 2025; https://doi.org/10.5194/essd-17-4865-2025; or De Cariat et al. 2025; https://doi.org/10.5194/essd-17-79-2025) and in other journals (e.g., Chala-Aldana et al., 2026; https://doi.org/10.1016/j.jas.2026.106639; or e.g. Brennan et al., 2026; https://doi.org/10.1093/najfmt/vqag027). Geological bedrock information is discussed in the 'Results' section.

Most published articles, even recent ones, do not follow a standardized approach to data organization and dissemination. Alternative formats, such as the one adopted in this study, can also meet transparency and reproducibility requirements.

However, to better address the Reviewer’s suggestion and align our dataset with the structures used in IsoArch and IsoBank, we added additional information to the table deposited on Zenodo. Specifically, we included: State; Country; Geographic Coordinate Systems; Coordinate instrument; Coordinate Type; Sample Type; Sample Part; Collected Sample Source; Preparation Step; Laboratory; Technique; Instrument; Reference Material; Normalizing value; Reference of the normalizing value; Avg. 87Sr/86Sr Reference Material; 1SD.

We have also changed the error of our values to 1SE to match those requested for IsoArch and IsoBank and we changed the labels of the geological information in Bedrock Type and Bedrock Age.

We added a subchapter in the main article (3.4 Dataset compilation) to indicate to the reader which categories are populated in the dataset.

Regarding the literature data, we attempted to simplify and align the various datasets cited and already structured as metadata.

In our opinion, compiling a comprehensive literature dataset is beyond the purpose of this article, which focuses exclusively on our specific dataset.