

We sincerely appreciate the insightful comments provided by both Reviewer #1 and Reviewer #2 on our manuscript. In response to Reviewer #2's suggestions, we have incorporated the requested modifications, which are detailed in the table provided below. We extend our gratitude for their constructive feedback, which has undoubtedly contributed to enhancing the quality of our work.

**REVIEWER #2'S COMMENTS**

**AUTHOR'S RESPONSE AND CHANGES**

Still a suggested improvement would be to **further organize or add subheadings to the conceptual Integration section.**

Done.

**Does all of Figure 1 happen during phase 3 "data processing"** e.g. which ISAD-G - which otherwise drops out entirely from the rest of the paper! - might suggest?

Figure 1 represents one of the numerous activities expected during project development — specifically, it pertains to the *primary information*. Consequently, it aligns with *the context of project management*. The ISAD-G standards serve as a conceptual equivalent in this scenario. We made a few modifications so that it might be better understood.

Given the frequent mentions of Archival Science as an informative foundation for the development of HORAI and the "three tools" (line 235) further developed from HORAI, a **current gap to be addressed would be more archival description-within Archival Science citations and detailing of them**, so that the reader clearly sees where HORAI differs and adapts *from* *them* to attend to the needs of archaeology.

Thank you for your suggestion. We have provided detailed citations regarding Archival Science in other related works — works that are cited along the paper as well (for instance, Del Fresno & Mauri 2020; Del Fresno *et al.* 2021; Travé *et al.* 2021). Due to space constraints in this article, reiterating these citations would be repetitive.

I'd like to see much more said about the next step aim of **"decelerate methodological processes characterized by streamlining and simplification of information"** (line 313).

We have extended this part.

The title does suggest a more "technical" (line 242) kind of paper that the authors immediately disabuse the reader is not what's here, so **adding the word 'model' or 'modeling'** to it, is a constructive suggestion.

We agree. Accordingly, we replaced the word 'platform' with 'model', as it aligns better with the purpose of this paper.

**Do consider mentioning the Spain context of all this work in the abstract** at least, as it gives coherence to some spots in the text.

Indeed. Thank you!