

AUTHOR'S POINT-BY-POINT RESPONSE

Addressing the most important changes and their locations in the revised article

I express my sincere gratitude to both reviewers for the effort they put in. The revised version of the article contains additional relevant information that provides even more convincing evidence for the hypothesis that the spatial data underlying portolan charts originated in classical antiquity.

All the modifications (additions) are highlighted in grey in the PDF document ***Marelić T - Classical Antiquity Origin of Spatial Data Underlying Portolan Charts REVISED_&_MARKED*** attached to the bulk of files in this upload session.

In this response, there are explanations for the reasons behind the implementation of the most important changes and their locations in the revised article.

PEER REVIEW REPORT #1

report #1 of hgss-2026-2, reviewer: Anonymous Referee #1

On page 4, in section 2 *Outlining the findings, scope, and framework of this research*, the updated information on Pietro Vesconte can be found.

PEER REVIEW REPORT #2

report #2 of hgss-2026-2, reviewer: Roel Nicolai

On page 4, the word “corroborate” was put to describe the hypothesis (instead of “demonstrating”).

On page 5, proper descriptions of Petrus Peregrinus’s two types of magnetic compass were inserted.

On page 23, a passage that describes the fundamental differences in planimetric accuracy and tilt when georeferencing the *Carta Riccardiana* to the Mercator map and the equidistant cylindrical map $\phi_0=36^\circ$ has been added.

On page 25, a corrected paraphrasing of Nicolai’s analysis regarding late mediaeval navigation (2014) has been added.

On page 26, “slightly better” was put instead of “superior alignment”, and the passage past “...and the hypothesis is supported by several reasons” is now broken into two paragraphs, with the second paragraph being expanded utilising additional quantitative information.

On page 27, the caption of Figure 7 has been slightly modified to make it more accurate.

Pages 28 and 29 contain the newly added material:

- On page 28, the paragraph and Table 2 explain the LSE-computed differences in scales of the *Carta Riccardiana* subsections after georeferencing them individually to the modern map in the Mercator projection and to the modern map in their best-fit equidistant cylindrical projection.
- On page 29, the paragraph and Figure 8 focus on similarities between the Atlantic coasts on the *Carta Riccardiana* and on the modern approximation of Marinus of Tyre's map rotated -10.9° to rectify the overall anticlockwise tilt of its coastlines.

On page 31, there is updated information regarding the similarities between on the *Carta Riccardiana* and a modern approximation of *Ptolemy's first projection*, inserted after Figure 10 (former Figure 9) has been updated, and it has been compared to its georeferencing to a modern map in the *Marinus of Tyre's projection*, not the Mercator map (as it was in the initial version).

On page 32, Figure 10 has been updated with sharp-knee inflection points and the connecting lines.

On page 34, the paragraph and Figure 12 are newly added, describing and illustrating how the *South Atlantic* subsection of the *Carta Riccardiana* aligns almost identically in tilt with its coasts on the map in *Ptolemy's first projection*, whereas its *North Atlantic* subsection exhibits only a slightly smaller degree of tilt.

On page 35, the word “corroborating” was put to describe the hypothesis (instead of “validating”), and “... to a significant extent” has been used to describe the proposed mechanics of the classical antiquity origin hypothesis instead of “... with outstanding plausibility”.

On page 44, Figure A1 (Vectorised coastline of the anonymous *Carta Riccardiana* (c. 1300–1325) georeferenced to the equidistant cylindrical map $\phi_0=36^\circ$) was added and assigned to the Appendix A. Thus, the former appendices A and B have now become appendices B and C.