

Editor's comments:

I would like to thank both reviewers for their valuable work and insightful comments, which have significantly contributed to improving the quality of the original manuscript.

In particular, I wish to acknowledge Reviewer #1 for the thorough and rigorous evaluation of the paper, as well as for the critical suggestions provided. The manuscript has undergone substantial revision since its initial submission, largely benefiting from this careful perspective. The authors have addressed most of both reviewers' comments and have revised the manuscript accordingly; where modifications were not made, their reasoning has been adequately justified through thoughtful discussion.

The manuscript presents a remarkable dataset based on direct measurements, which is both well documented and of a high scientific standard. In its current form, and following the revisions, I consider it a valid contribution and recommend its publication, provided that the following minor issues are resolved.

The current shape of the manuscript still definitely requires a review of the English language. Issues such as inappropriate capitalization, repetitions, double negatives, missing subjects, and incomplete sentences are still present and, at times, affect readability. As the editorial office does not provide language editing services, the authors are requested to carefully revise the text to ensure clarity and correctness throughout.

Additionally, figure captions should be reviewed and improved to ensure that they are clear, complete, and fully informative.

Subject to these final revisions, the manuscript is suitable for publication.

- A thorough grammar and English language correction was undertaken with the aid of the co-author's.
- Figure captions that were unclear or lacking in detail have been improved to add clarity.

Notification to the authors:

1. Please include the corresponding author's name alongside the email address in the "Correspondence to:" section of the title page with the next file upload.

- This has now been added

2. The "Code and data availability" section of the manuscript: If the data are not publicly accessible (including cases where access is provided "upon request" or is missing), a clear and detailed justification must be provided. For further details, please refer to:

https://publications.copernicus.org/for_authors/manuscript_preparation.html#assets →
Data sets

- Code and data has been added to a GitHub repository and the appropriate DOI is provided

3. Please ensure that the colour schemes used in your maps and charts allow readers with colour vision deficiencies to correctly interpret your findings. Please check your figures using the Coblis – Color Blindness Simulator (<https://www.color-blindness.com/coblis-color->

blindness-simulator/) and revise the colour schemes accordingly with the next file upload request. -> Fig. 10

- Figure 10 has been updated to a more suitable colour scheme.

4. Referring to figures 2, 8: OpenStreetMap images must include visible attribution on images/snippers. As embedded links may be lost in the published PDF/HTML versions, please repeat the full credit in the figure caption (e.g. “© OpenStreetMap contributors, <https://www.openstreetmap.org/copyright>”).

- OSM is now also credited in the figure captions