

# Review of: "The Comparison of Traverses Adjusted by Non-Rigorous and Rigorous Methods of Adjustment"

Krzysztof Karsznia<sup>1</sup>

<sup>1</sup> Technical University of Warsaw

**Potential competing interests:** No potential competing interests to declare.

The manuscript presents a comparison of two adjustment approaches used in total-station traverses. The general idea is gripping and undoubtedly - sound, especially for practitioners. Also, scientists can feel satisfied; however, in that case, the material should be extended by using a more robust mathematical apparatus. Nevertheless, I assume that the article is dedicated more to a general audience, and that goal has been achieved.

Section "Results" lacks some comments about the results in numerous tables. The considered control points also need visualization on a sketch or map. What is more, the first comments should appear right beneath each table or group of tables, leading to a general discussion presented in the forthcoming section.

From the technical point of view, presenting distances with a precision up to 0.00000001 [m] is a mistake needing immediate correction (e.g., 0.01878829 indicates that the precision was 0.00001 [mm] and none of the known surveying instruments could offer such a resolution).

Also, the final discussion needs to be more specific. Each statement confirming the superiority of one method versus another needs justification in terms of statistical outcomes. Nevertheless, the material is interesting and, after relevant completion, can be published. At the moment, my recommendation is "major revision".