

HESS Technical Note:

A new laboratory approach to extract soil water for stable isotope analysis from large soil samples

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AUTHORS' RESPONSE

REVIEWER 3

Reviewer's Comments:

This article presents a novel method for extracting soil water. The method utilizes air circulation to heat the soil water into vapor, which is then condensed and collected at 8 °C. It is purported that this approach remarkably enhances the accuracy of soil water extraction and shortens the operation time. However, in comparison with the improved low - temperature vacuum extraction method, it is less adaptable for batch - sample determination. Although acquiring soil samples is not overly arduous, the requirement for large - scale samples and the lengthy water extraction process undoubtedly pose limitations to its application prospects.

Consequently, despite the fact that the article has been refined in accordance with the reviewers' suggestions and exhibits certain potential in terms of accuracy, this method still has several issues that necessitate resolution. Additionally, the author should delve deeper into its practical application scenarios and future development directions. Thus, prior to the article's publication, it is essential to clarify and revise some key problems.

Authors' Response:

We agree with the opponent that the issues of practical use, limitations and possible future development of the proposed method/apparatus are not sufficiently discussed in the paper. For this reason, subsection „4.4 Limitations of the proposed method and future development“ has been added to the discussion, where these aspects are discussed in more detail. Some of this newly added information has also been reflected in the conclusion.