

Reviewer comment on revised manuscript “Long-term and high frequency non-destructive monitoring of water stable isotope profiles in an evaporating soil column” by Rothfuss et al.

I appreciate the improvements and additions made to the manuscript. The structure was improved according to the editor’s recommendation. Although very long and difficult to understand sentences were partially shortened, there are still relatively many language-related mistakes (e.g. the use of respectively on P8LL8) that could be corrected to improve readability. Please do not report significant results when not supported by the statistical analysis (P1LL26; also, no uncertainty of the slope estimates are provided here which could help the readers to form an opinion themselves). Similar issues had been criticized in the first version of the manuscript. Furthermore, in that paragraph (P1LL26), the description of potential outside air influences and the comparison with slopes inferred using temperatures for a local weather station remains somewhat confusing and seem somewhat in reverse, with overall unclear implications. I think the authors could structure their thoughts more clearly here.

Abstract: Although the additional information is worth reporting, the abstract may be shortened.

P4L28: Consider consistent use of SI units as suggested by the editor, also later in the manuscript.

P4L29: Please consider defining „o.d.“ for a non-technical audience.

P7L16: I suggest modifying the section title since the reference is not a proper reference and also unusual in a title.

P8LL8: Please correct the use of respectively.

P13L14: Since the wind velocities are not the subject of study, consider putting it differently, i.e. specific wind velocities may have caused the observed differences.

P16L12: Uncertainty values should not be set just arbitrarily; please provide a (brief) justification for the choice of values.