

Response to reviewers

7 June 2026

Thank you again to the editor and two anonymous reviewers for their thoughtful assessment of our manuscript, helping us to improve the manuscript. We have revised the manuscript in accordance with reviewers' feedback. Here is our point-to-point response to the comments. Reviewer comments (AR#1 and AR#2) are in plain text, and our responses are in bold text. We have also included the corresponding line numbers from the revised manuscript in parentheses where relevant.

1 Response to Anonymous Referee #1

AR#1: Line 12: Maybe this should "... ratio beyond a vapour pressure deficit of 1 kPa .."?

Response: Thank you! We have corrected the sentence.

AR#1: Line 28 (29): "evaporation is often"

Response: Thank you. We have corrected the sentence.

AR#1: Line 43 (44): "higher Bowen ratios" is more correct.

Response: Thank you! We have changed from "increasing" to "higher".

AR#1: Line 56 (57): Could rephrase to "... in the coastal west to dry and cold climate in the continental east."

Response: Thank you for the suggestion. We have updated the sentence accordingly.

AR#1: Line 75 (76): Figures should be sequential; switch Figures 1 and 2.

Response: Yes, thank you! We have changed the order of the figures.

AR#1: Line 93 (94): Delete "Towards"

Response: Thank you. We have updated the sentence accordingly.

AR#1: Line 398: Delete "from"

Response: Thank you for pointing this out. We have corrected the sentence.

2 Response to Anonymous Referee #2

AR#2: In the first line of the Abstract, the authors state that atmospheric demand for evaporation "is expected to increase" — given the current state of the literature, I would suggest revising this to reflect something

more specific that states recent trends indicate rising temperatures, increasing VPD, though I leave this to the authors' discretion.

In the second line of the Abstract, the authors refer to a "typically moisture-rich region" without having first introduced the study region (although it is in the title); as northern latitude ecosystems broadly cannot be characterized as moisture-rich, I would suggest introducing Norway earlier in the Abstract to ground this descriptor. The specific context of Norway is especially important when discussing the longer snow free season. In other northern ecosystems, precipitation is increasing, resulting in more snow, and therefore longer snow-covered seasons. These precipitation dynamics are too diverse to summarize simply based on latitude.

Response: Thank you for your comments. We have revised the opening sentences of the abstract as follows: "As the atmosphere warms, atmospheric evaporative demand is expected to increase across many high-latitude ecosystems, while the duration of seasonal snow-cover is projected to change. In Norway, a typically moisture-rich region, improved understanding of the controls on evaporation is needed to assess how these changes may affect ecosystem hydrology." As your comments are also relevant to the introduction, we have rewritten a few sentences in the introduction accordingly. Specifically, in line 22, the sentence "These are typically moisture rich regions with numerous lakes and wetlands." has been changed to "Norway is situated in a typically moisture rich region with numerous lakes and wetlands." Furthermore, in line 32, "and snow cover duration typically declines (Rizzi et al., 2017)" has been revised to "and snow cover duration declines in many areas (Rizzi et al., 2017; Mohammadzadeh Khani et al., 2022)."

AR#2: On Line 176 (177), "The soil heat flux (SHF) 3" - 3 may be a typo.

Response: Thank you for pointing this out. This should have been a reference to equation 3, we have included "equation".

AR#2: On Line 419, the citation "(Spence and Rouse, 2002) found" contains a bracket error and should be revised to "Spence and Rouse (2002) found".

Response: Thank you. We have re-formatted the reference.

AR#2: On Line 458 (457), a second comma in the paragraph appears unnecessary and should be removed.

Response: Thank you! We agree and have removed the unnecessary comma.

AR#2: Finally, on Line 462 (461), the Hetager and Lystad (1974) reference needs re-formatting.

Response: Thank you. We have re-formatted the reference.

3 Additional changes

During the final checks of the manuscript, we identified numerical errors in the reported annual evaporation values and informed the journal editor by email on 31 May 2026. The following corrections have therefore been made. The errors were only in the text. No figures were changed and corrections do not affect the analysis, interpretation, or conclusions of the study:

- Line 14: change from "81 mm" to "80 mm"
- Line 347: change from "204 mm" to "208 mm"
- Line 347: change from "(81 mm) at Finse and (69 mm) at Adventdalen" to "81 mm at Finse and 80 mm at Adventdalen"
- Line 362: change from "(81.1 mm to 207.6 mm)" to "(80–208 mm),"
- Line 363 and line 465: change from "(44.6 mm to 384.8 mm)" to "(45–385 mm)"
- Line 510: change from "81 mm" to "80 mm"

Furthermore, the date formatting in Fig. 2 has been corrected. We have also revised the formatting of numerical ranges (e.g. from "0 mm to 5 mm" to "0–5 mm") and the formatting of figure references (e.g. "Figure 5" → "Fig. 5") to comply with the journal style recommendations.