Dear Editor,
On behalf on myself and co-authors, I'd like to thank you and the reviewers for assistance with the manuscript. We have made changes to the manuscript to address the small issues raised by Reviewers 1 and 2. Responses to the specific comments are addressed below.

Best regards,
Max Berkelhammer

Reviewer 1:
Check-In Figure 4, the color of the twig water needs to be more evident, and it gets confused with the color of the snowmelt with low values.

We have added a subpanel to this figure that separates the precipitation from the xylem water so both can be easily seen without blocking each other.

Check-I would suggest editing the result section to explain the isotopic data in section 3.2 (the first paragraph, in particular, is hard to follow), where the water partitioning from snow, precipitation stream flow, and transpiration are quickly explained.

We have added details to the first paragraph of Section 3.2 to increase explanation of the results.

Reviewer 2:
Based on the comprehensive revisions and the authors' responsiveness to feedback, I recommend that the manuscript be accepted for publication after minor revisions. The suggested improvements will enhance the manuscript's clarity and impact, ensuring it effectively communicates its significant contributions to the field. I appreciate the authors' diligent efforts in revising the manuscript. The study offers valuable insights into how canopy structure influences ecohydrological processes, particularly in the context of snowmelt utilization and climate variability.

We appreciate the positive feedback on the work.

i.) the influence of legacy-effects: trees do not always react immediately and stress or recovery-effects might show up delayed und decoupled from year-to-year variations;

We have added discussion in Lines 519-523 to bring up questions on the role that legacy may be playing in the response to variations in seasonal precipitation inputs.

ii.) ii.) the role of differing rooting patterns between thinned and dense stands: while contrasting literature is cited in the introduction, this highly interesting aspect is not touched later. In dense stands, deeper rooting patterns might develop due to

competition, and thinned stands might develop shallower rooting systems (see Schenk 2022 the shallowest possible rooting system). The explained differences in interception might also affect root distribution and, hence, the dependence on precipitation/deeper water. If the soil water isotope data would be higher resolved (and not only from the first 10 cm), the mixing model could've used in a much more effective way, in my opinion (i.e., by estimating water uptake depths of the trees).

We have added reference to Schenk 2008 and more extensive discussion on root water uptake profiles throughout the manuscript.

iii.) iii.) the influence of snowmelt running off from the slope and being more available downslope (i.e., snowmelt could be more important for trees located downstream).

In lines 70-75 and elsewhere we discussed the Martin et al., 2018 paper that explicitly addresses the importance of downstream snowmelt flow.

- l. 14, l.47/48: Interception or rooting depth? (see main comments)

We added text to discuss the role of both above and belowground processes.

- l. 97-99: the statement contradicts what is said in l. 85-87, which is imo a good starting point for the ms - but later it is not referred to this interesting aspect

We used some text to try and reconcile the apparent contradictions.

chdck - l.119: "difference in water resources" - imprecise, please be specific what is meant here

We removed the reference to water resources because it was a little confusing and unnecessary.

- l. 119/120: total transpiration demand of dense stands will be higher than for thinned stands - could this alone explain the results obtained?

Here and a few places we noted the higher water demands of these dense stands as part of the reason they are more able to rely on big snowmelt years..

check - l.192: "small samples" - imprecise, "small amounts of sample material"?

We specify this value to be 0.6 ml.