

We would like to draw the attention of the reviewers on the fact that we have made modifications that were not directly answers to their questions, but that arose when working on the reviews.

- 1) We have simplified the way we calculate the coefficient of variations C_v in order to have a direct estimation in % of the diurnal changes (Fig. 9). This does not change the general trends discussed in the manuscript, but only the unit of C_v .
- 2) We now calculate R and S from temporal series of Pw and Q averaged of 5 days rather than the 30 days as previously done. We did that to avoid effects of the winter values of Pw and Q on the melt-season values, and therefore on the R and S calculation. Using a 5 days' time window yield to R and S values that are not biased by the uncertainty in measuring Pw during the early and late melt season because of the anthropogenic noise. These changes are visible in Fig. 8 and Fig. 10, but overall they do not affect the general results. We added Fig. S4 in the supplementary information to show the influence of the 5-day averaging.
- 3) We added a table of notation to better guide the reader.
- 4) In Fig. 10, we now show both years 2017 and 2018 instead of an average of the two years as we consider that this is more accurate. In this way we directly represent the values of R and S shown in Fig. 8 in the Fig. 10 when comparing them to changes in Q. This has an influence at low relative Q, and the agreement with the theoretical scaling is now less pronounced as before. We have modified the text accordingly.