ABSTRACT

Line 17-18: You write that xylem water and bulk soil water deviate from LMWL, but you do not explain explicitly in what direction. Instead you put them in relative context. Maybe mention the phrase in line 18 ”with xylem water …” later?

Line 22-23: The soil depth may constrain differences in rooting depths but not necessarily in root water uptake depths.

STUDY AREA AND METHODS

Line 113: how many samples in specific (range, average)?

Line 118: tension lysimeters: which brand?

Line 119: why “trees that were not used for xylem water sampling”? And how far are these trees from the other trees?

Line 126: reference

Line 148: more details on the method applied here, please. How were those analyzers calibrated (IRMS, 2 ICOS)? Did you make a cross-comparison of these analyzers?

Line 165: Did you consider dependencies of samples since you always sample the same trees? Did you check on criteria of ANOVA (normal distribution of residuals, homogeneity of variances)?

RESULTS

Line 176: State time range of growing season.

Line 180. Where did you define / explain total water depth / soil water depth?

Figure 2: do you also have data from before June 2016?

Fig 3a and b: you could add precipitation/ soil water, e.g. δ2H precip and δ 18O precip resp. δ2H water and δ18O water, equation for LMWL

Figure 3c: Please, explain why you summarize 0-15 cm and 30+, maybe offset less big if only 35-45 cm? And 5-15? Which soil areas do lysimeters see?

Line 210: maybe reference to figure already here: “given tree species (Fig 3c)”

Figure 2: How did you determine soil water depth of upper 0.5 m?

Figure 4 uses colors for different periods that have been used before for tree species (use rather none? Or colours of species? Or completely different colours?)

Generally, it might be better not to use the same colours for soil values as for plant values.

The x-axes differ which is not ideal for comparison. Since the y-axis of each plot is the same, you could consider removing the space between plots.

Figure 5: You could again add xylem, δ2H xylem. Also here plots share y-axes.

Figure 8: This figure has many colours. But I do understand that you are limited in colours here. You could use different patterns? Or also use grey/white instead of switching to a completely different colour (Or,Pw).

Fig. 8: big differences again within species. How come? Can you explain these differences maybe by tree traits (Table 1)?

DISCUSSION

Line 300: intra-specific as well

Line 350: Give your values.

Line 353: SWCs were relatively large?

I noticed that in the text it says Snelgrove (2019), in the references it is 2020.

Figure 5: big scatter within species as well.

In the figure legends LWML is local mean water line, … meteoric …

Figure 6: typo soili

Figure 6: Just to clarify: do you show here the bulk soil water average, or per depth?