



Supplement of

Xylem water in riparian willow trees (*Salix alba*) reveals shallow sources of root water uptake by in situ monitoring of stable water isotopes

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Supplementary Material



Figure S1: *In situ* time series of daily $\delta^{18}\text{O}$ in: Precipitation (a), Pit A and Pit B (b), and Northern and Southern Willow (c).

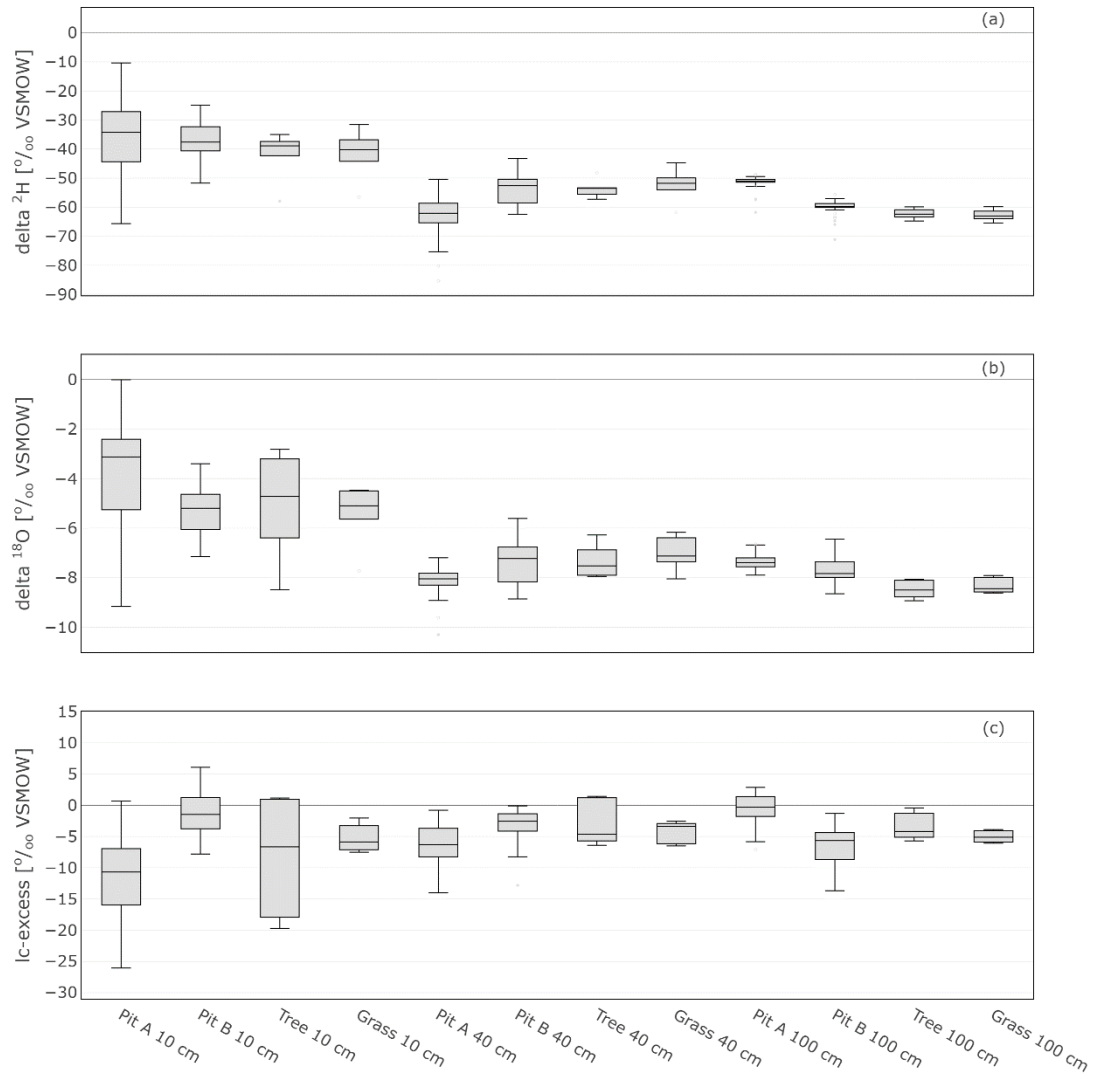
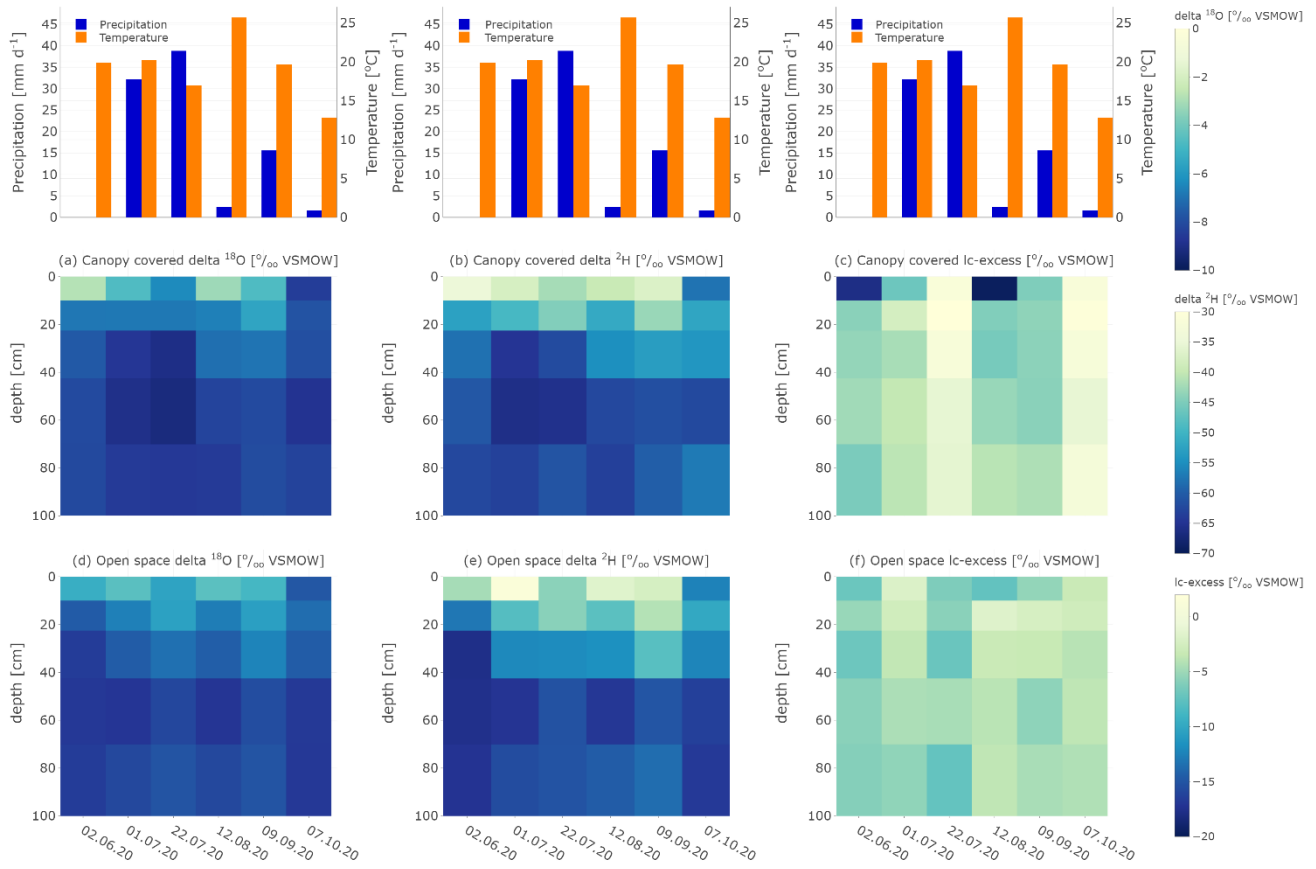
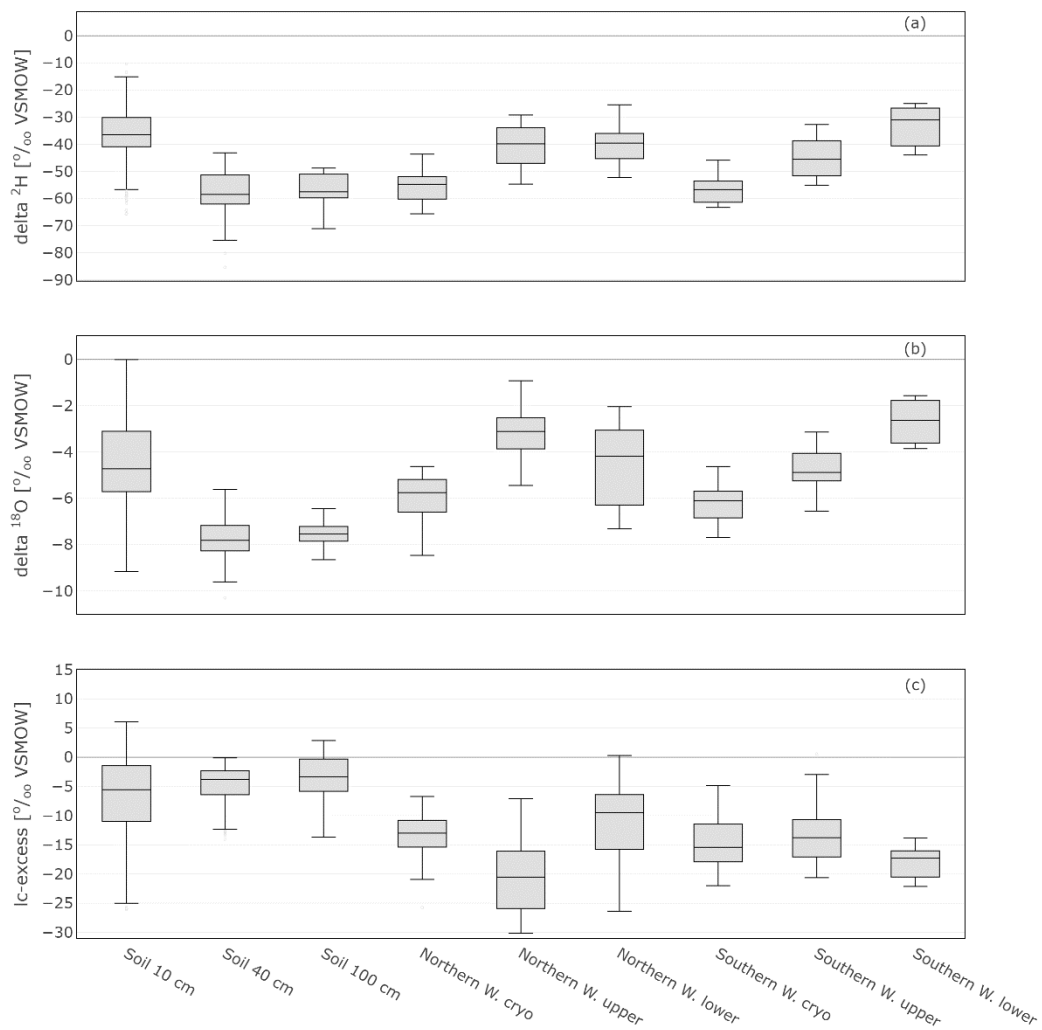


Figure S2: Box plots showing *in situ* and bulk soil sampling results at certain depths. For comparison bulk soil sampling results were estimated via mean of the depths above (for example 10 – 20 cm and 20 – 40 cm samples to calculate the result for 40 cm).



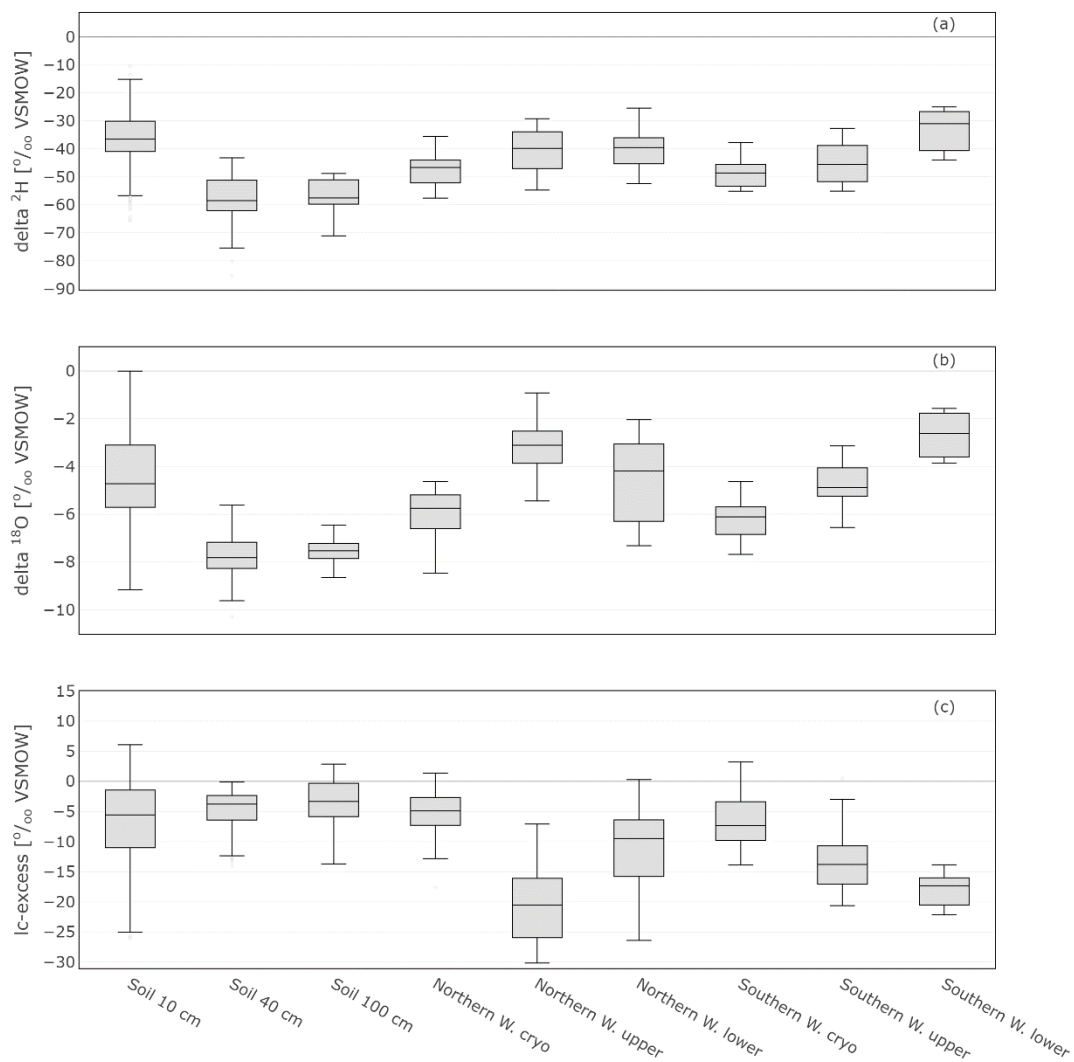
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Figure S3: Monthly bulk soil sampling isotopic results from two locations of the site. “Canopy covered” (a – c) is closer to Northern Willow and Pit A and “Open space” (d – f) is closer to Pit B and Southern Willow. On top of the plots is antecedent precipitation as 7d sum before sampling and the daily mean temperature.



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Figure S4: Box plots showing daily means of *in situ* soil and xylem water isotopic composition as well as the monthly cryogenic vacuum extracted twig water isotopic composition of the two willow trees.



20 **Figure S5:** Box plots showing daily means of *in situ* soil and xylem water isotopic composition as well as the monthly cryogenic vacuum extracted twig water isotopic composition of the two willow trees. Cryogenic vacuum extracted water results of $\delta^2\text{H}$ is corrected by 8.1‰ after Chen et al. (2020).

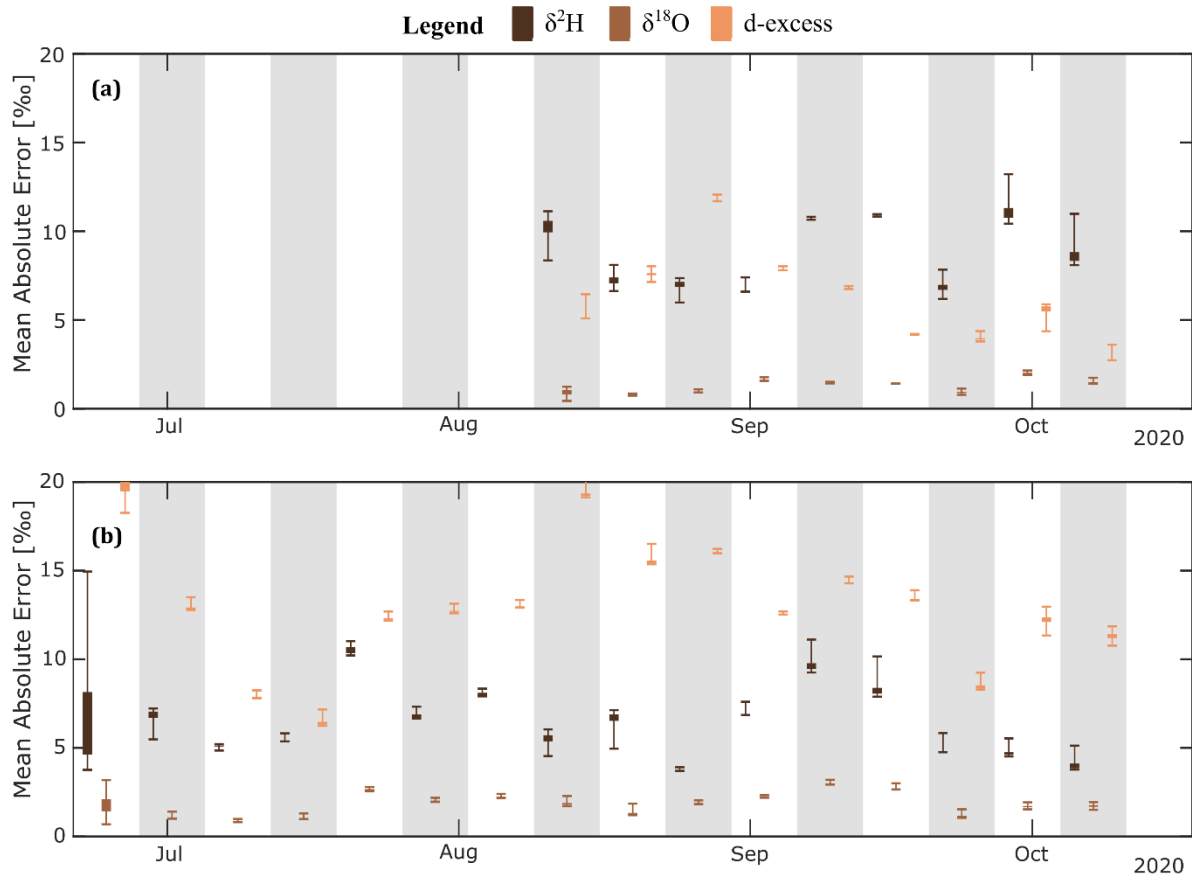


Figure S6: Box plot of mean absolute error for each isotope and week for (a) the Northern Willow, and (b) the Southern Willow.