

HESS Supporting Information

Article title: Water Use Strategy of Riparian Conifers Varies with Tree Size and Depends on Coordination of Water Uptake Depth and Internal Tree Water Storage

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The following Supporting Information is available for this article:

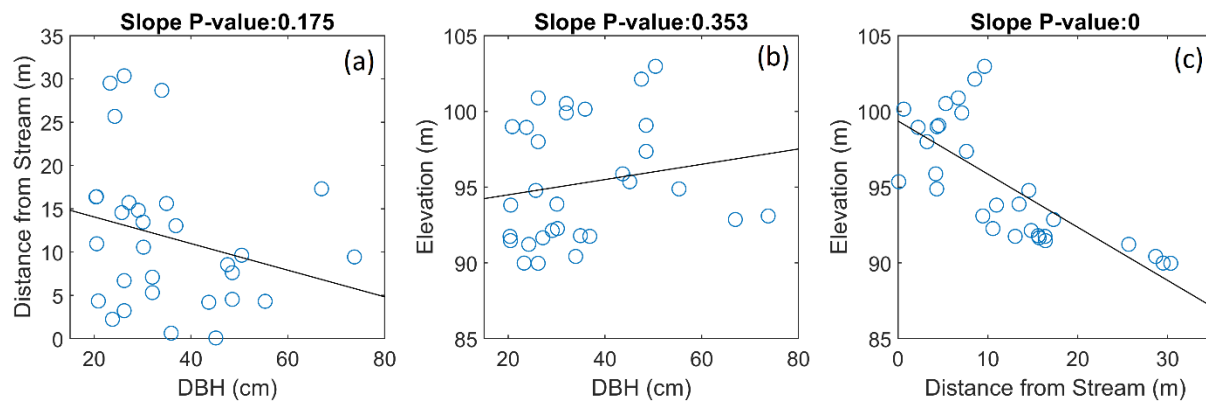


Fig. S1 Correlations between a) DBH and distance from stream, b) DBH and tree elevation, c) distance from stream and tree elevation showing best fit linear correlations and the p-value that the linear regression coefficient term is non-zero.

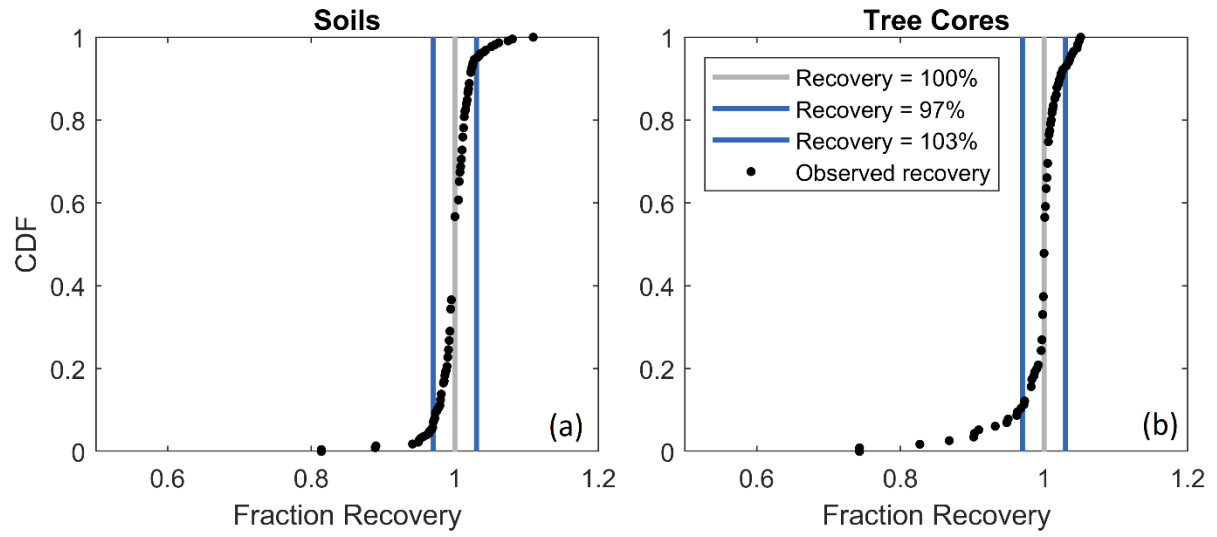


Fig. S2 Cryogenic Vacuum Extraction (CVE) water recovery for a) soils and b) tree cores.

Thresholds for $100\% \pm 3\%$ recovery are shown.

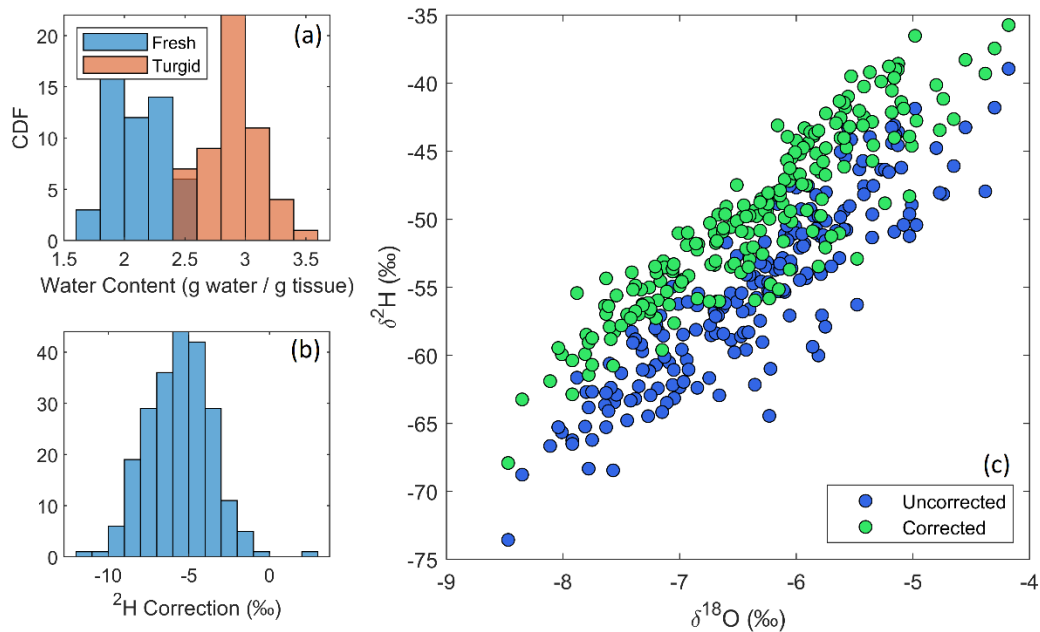


Fig. S3 a) Measured fresh and turgid water contents for a subset of cores (n=55) used to determine the average turgid gravimetric water content, b) histogram of the ^2H correction factor applied to xylem samples computed from the average turgid GWC, sample fresh weight, and sample dry weight, and c) dual isotopic plot of corrected and uncorrected xylem water samples

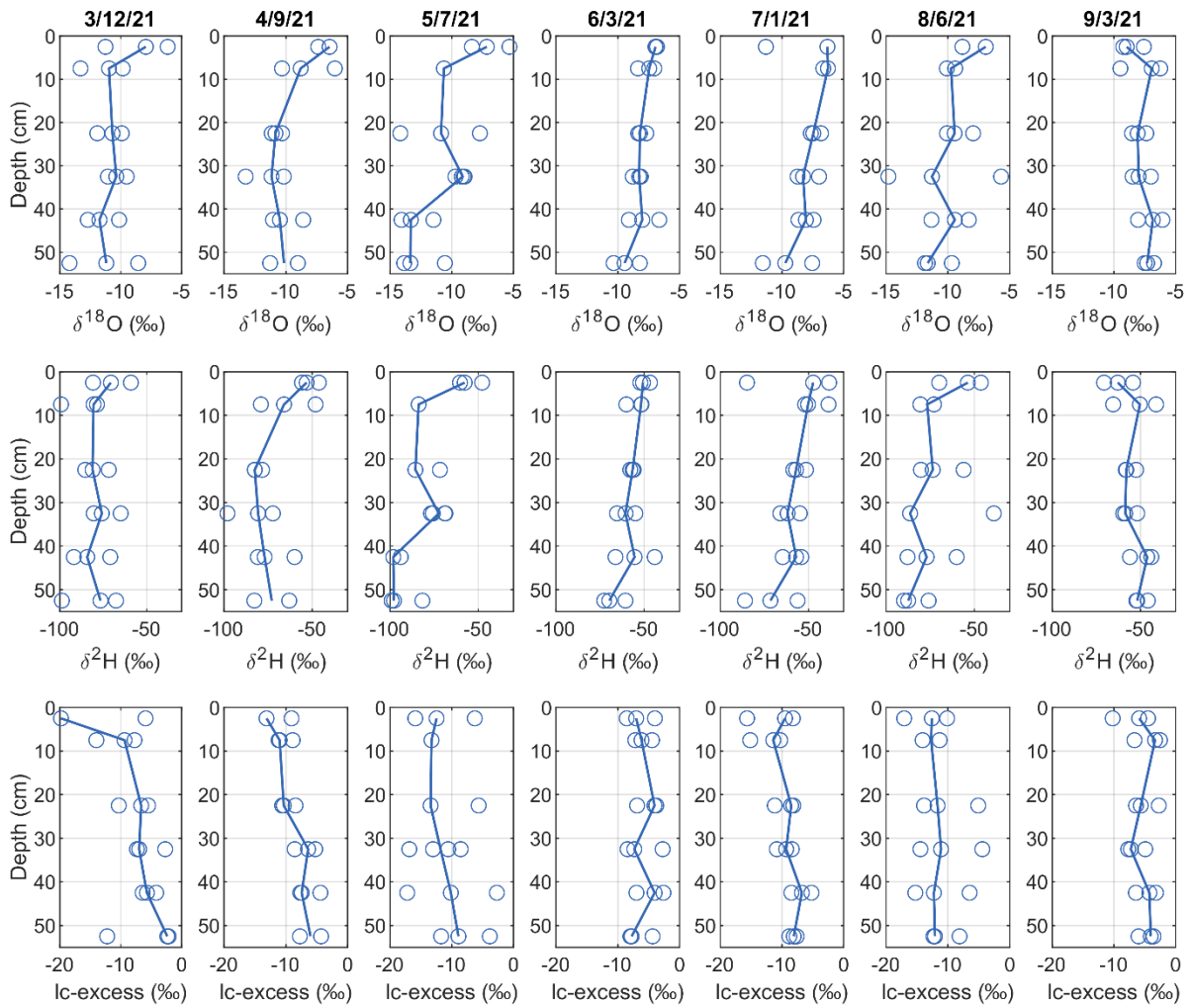


Fig. S4 Soil moisture isotopic depth profiles for each sampling period. Dots indicate individual measurements. Lines indicate the median value of all measurements by date and depth.

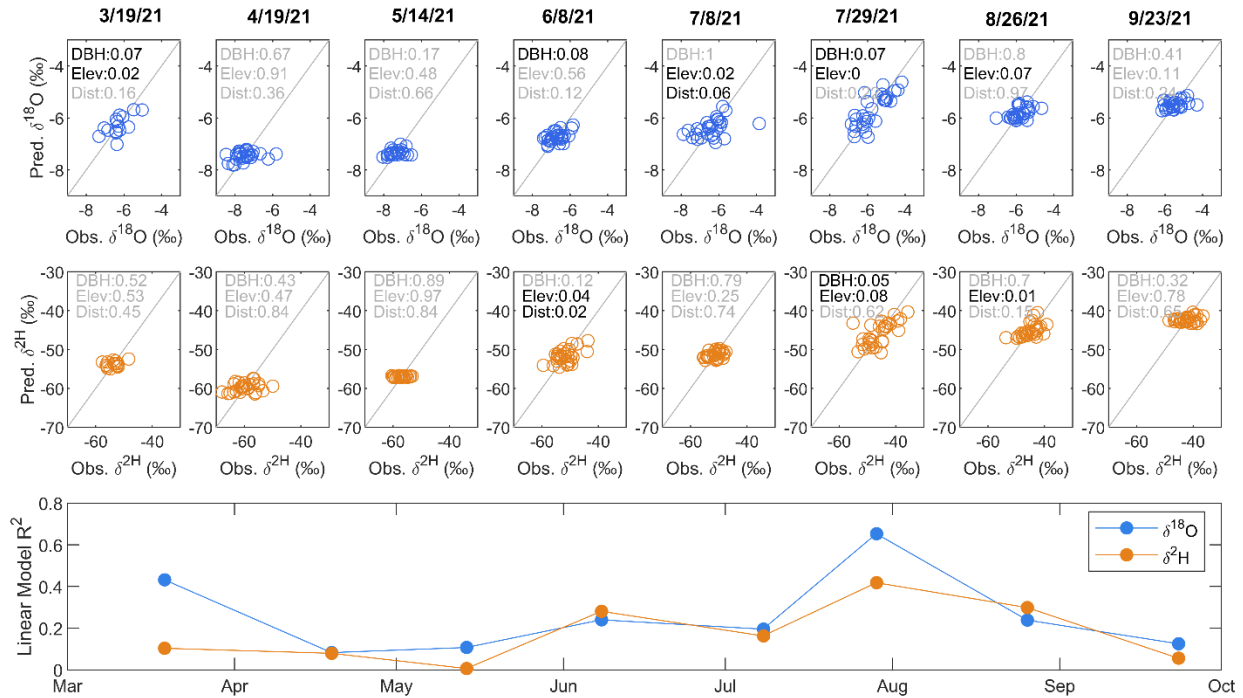


Fig. S5 Multivariate linear regression prediction of $\delta^{18}\text{O}$ and $\delta^2\text{H}$ from tree diameter at breast height (DBH), tree elevation, and horizontal distance from the stream for each sampling period. The bottom panel shows the model R^2 through time.

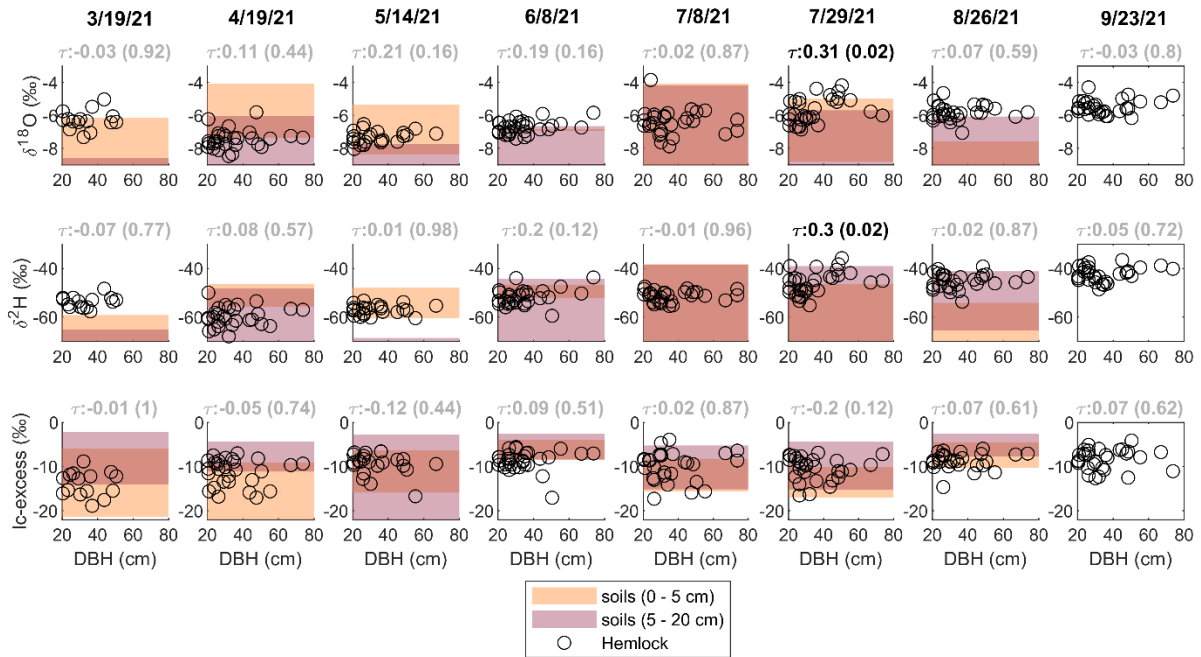


Fig. S6 Correlations between $\delta^2\text{H}$, $\delta^{18}\text{O}$, lc-excess and DBH showing Kendall's ranked correlation coefficient (τ) and p-values in parentheses.

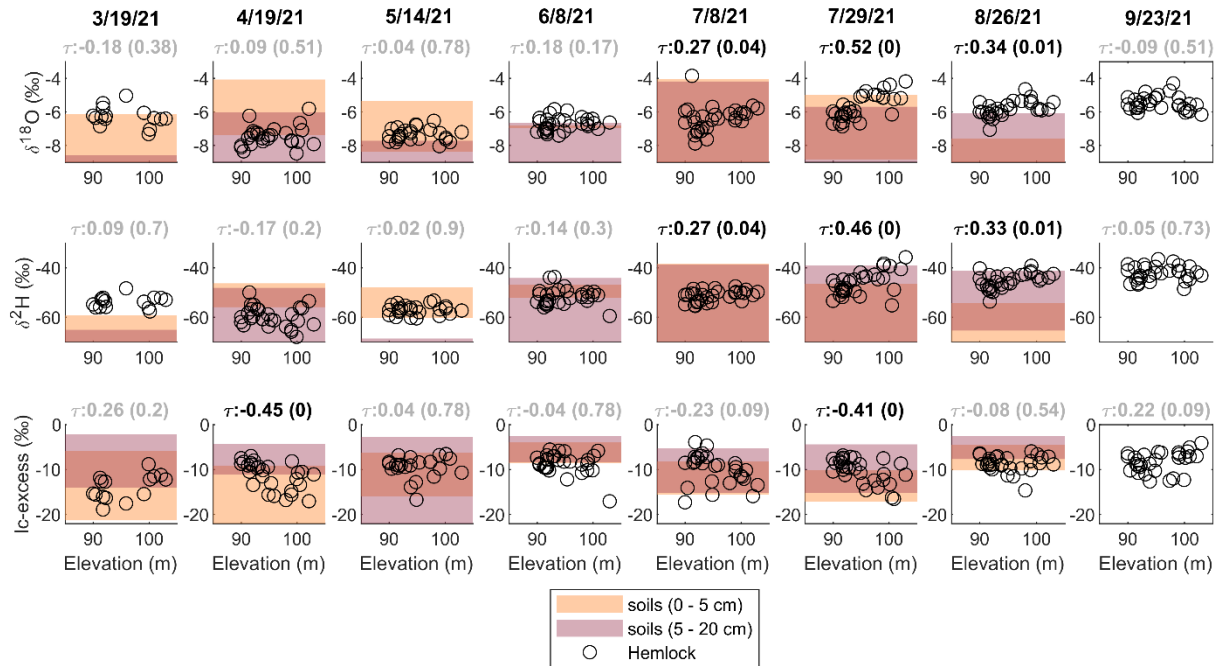


Fig. S7 Correlations between $\delta^2\text{H}$, $\delta^{18}\text{O}$, lc-excess and elevation showing Kendall's ranked correlation coefficient (τ) and p-values in parentheses.