



Supplement of

Are ghost forest trees a substantial source of methane from reservoirs?

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Figure S1: Flux chamber attached against a ghost forest tree at Hinze dam at the lowest measurement on top of Bark.

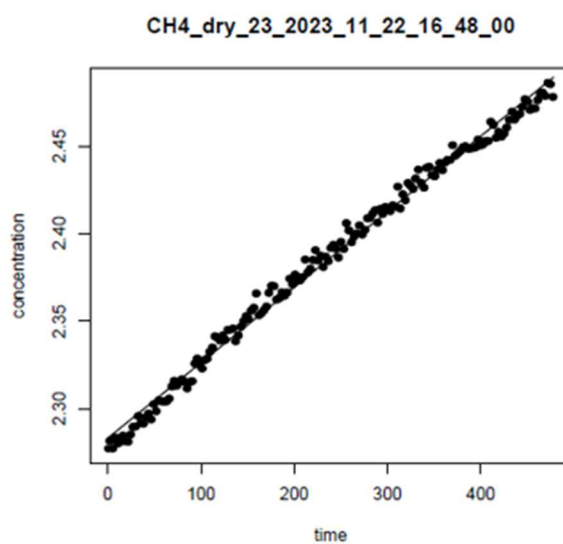


Figure S2: Example of a ghost forest tree stem CH₄ flux with linear regression, output from R-studio after the flux calculations.

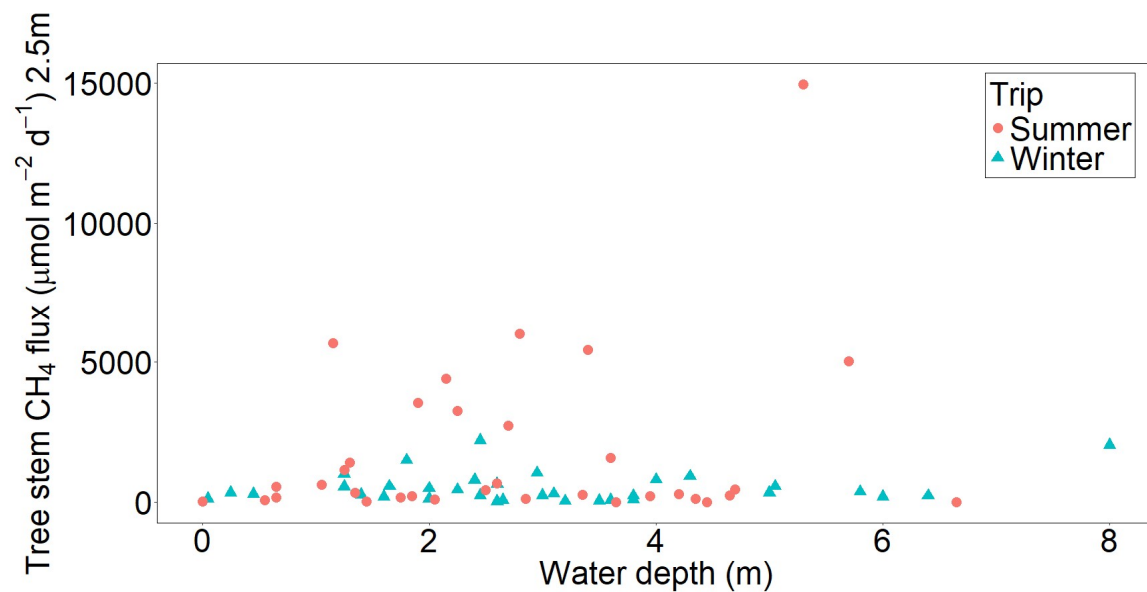


Figure S3: Tree stem CH₄ fluxes (μmol tree⁻¹ d⁻¹) and the measured water depth (m) during the winter and summer campaigns (n = Summer: 34, Winter: 32). Tree fluxes were scaled to 2.5 m stem height, for all sampled trees in the three study sites of the Hinze Dam.

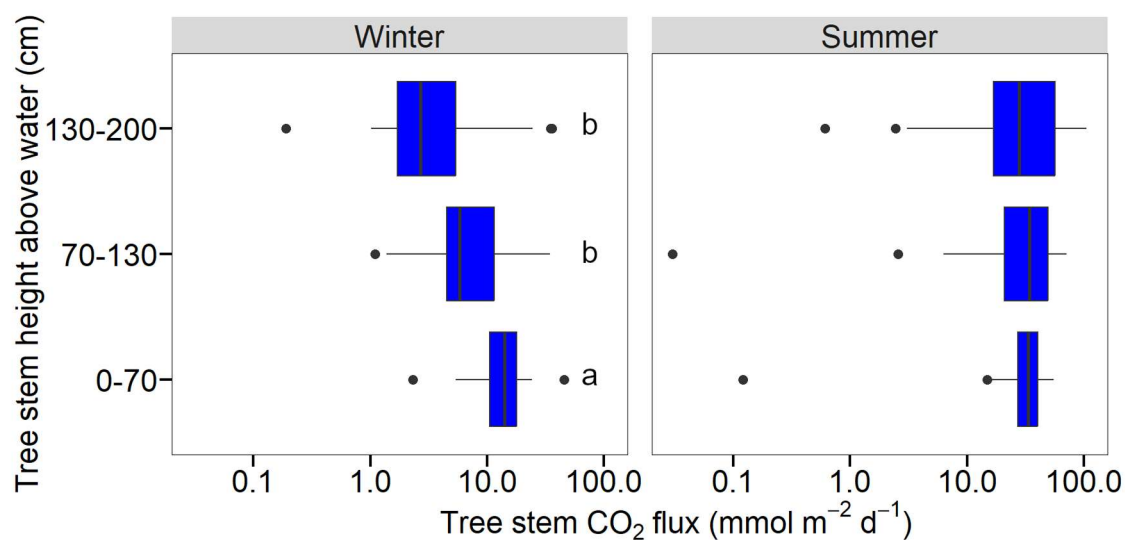


Figure S4: Tree stem CO₂ (mmol m⁻² d⁻¹) fluxes measured at three heights (cm) above water level at Hinze Dam (n = bottom to top: winter: 30, 29 and 23, summer: 22, 27 and 29). Data are presented for the three study sites during both winter and summer campaigns. Letters indicate significant differences. Note: log scale for x-axis.

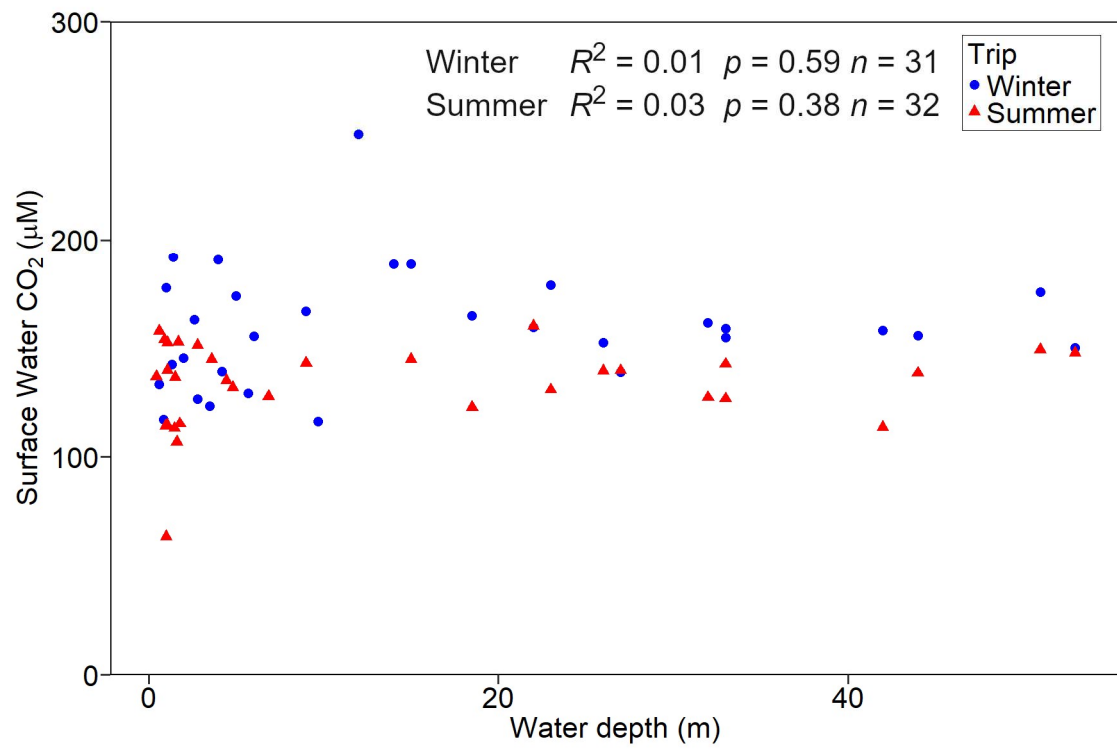


Figure S5: Surface water concentrations of dissolved CO₂ in Hinze Dam during the winter and summer campaigns. Data include samples from the three study sites and a south-to-north transect.

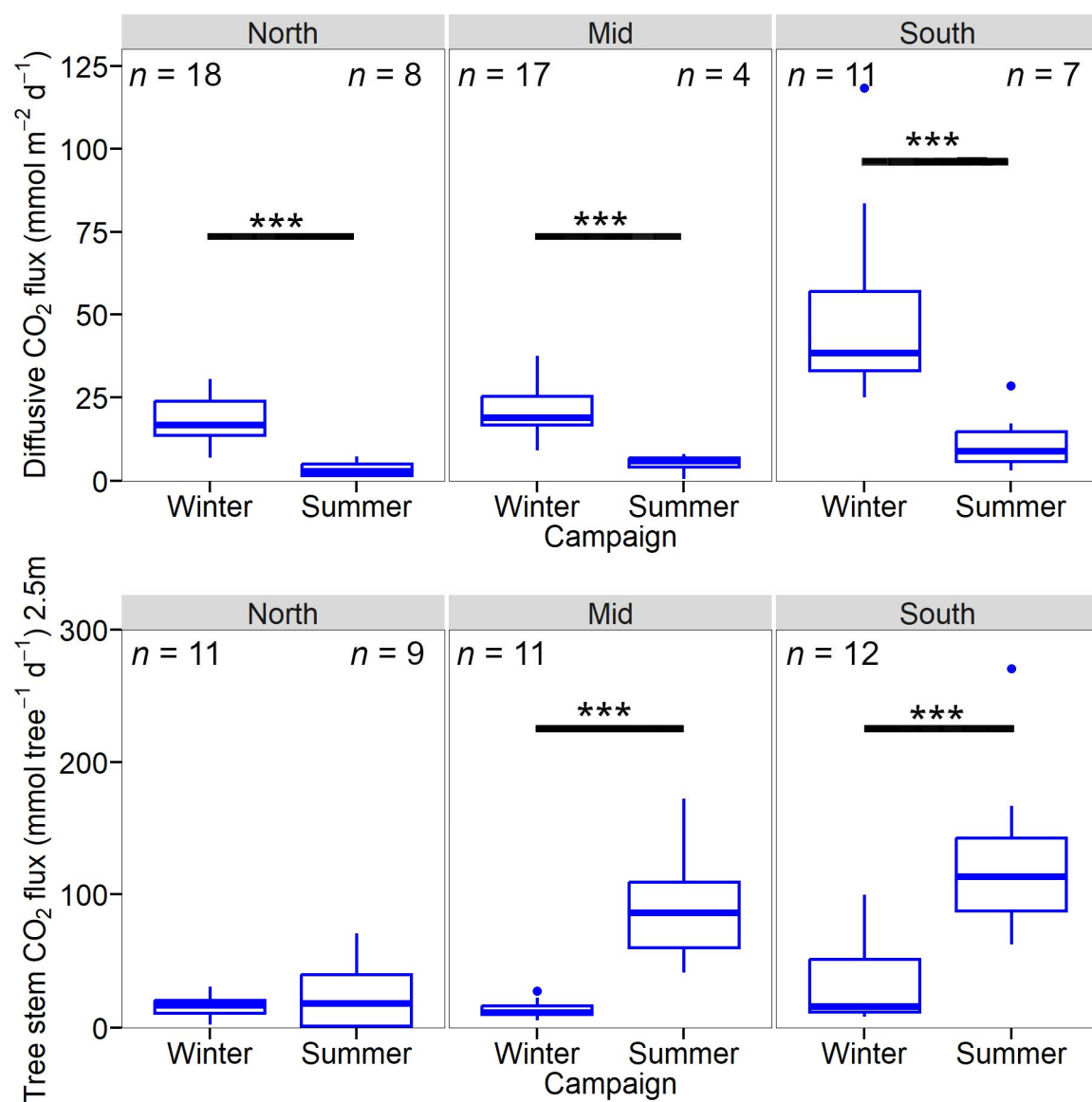


Figure S6: Diffusive CO₂ fluxes (top), and tree stem CO₂ fluxes (mmol tree⁻¹ d⁻¹) (bottom), for both seasons. Tree stem fluxes were scaled to 2.5 m stem height. Significant differences are shown with the solid horizontal line.