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Supplement of

Driving and limiting factors of CH_4 and CO_2 emissions from coastal brackish-water wetlands in temperate regions

Emilia Chiapponi et al.

Correspondence to: Emilia Chiapponi (emilia.chiapponi2@unibo.it)

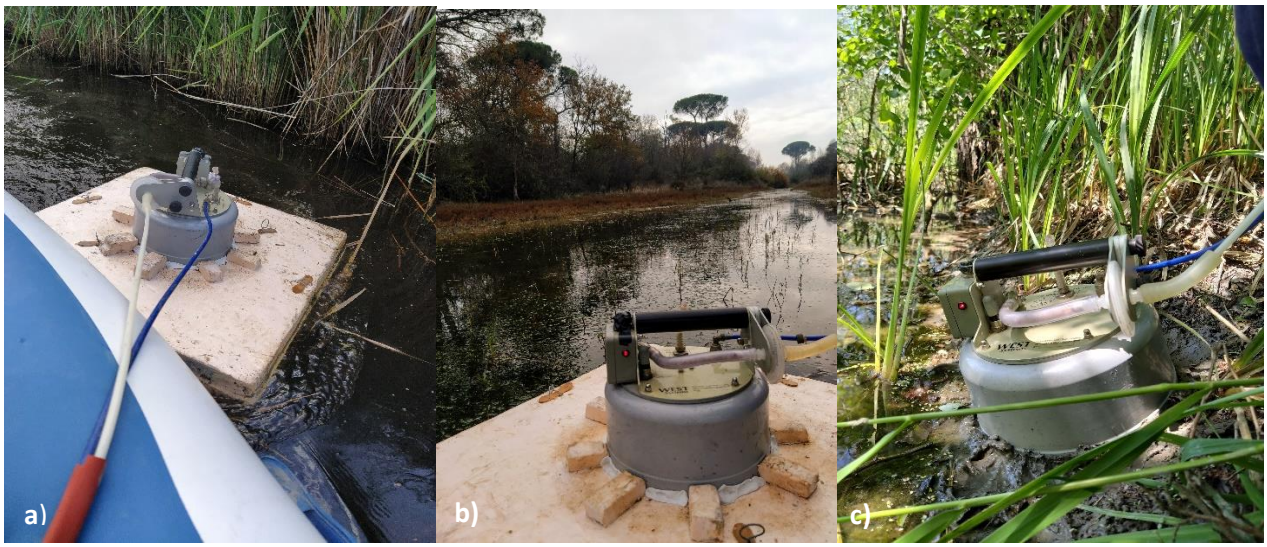


Fig. S1 - Measuring GHGs fluxes with accumulation chamber on (a) deep and (b) shallow water with floating devise, and on (c) flooded soils.

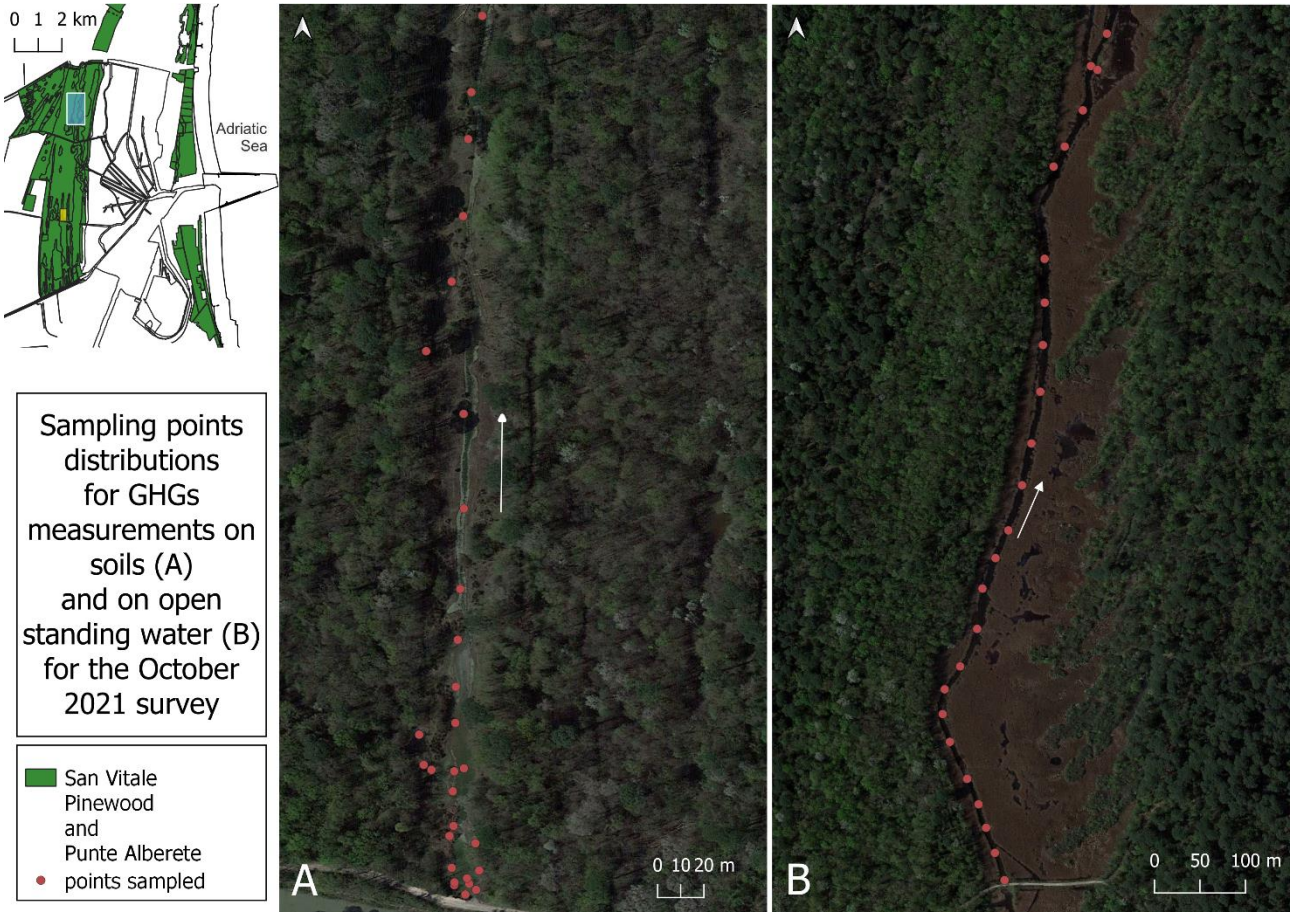


Fig. S2 – Example of distribution of points measurements in both type of sampling: soil (a) and open standing water (b).

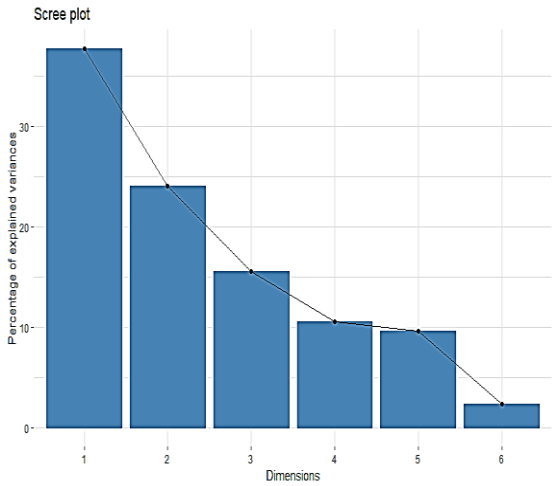


Fig. S3 – Scree plot of PCA analysis for CH_4 fluxes and environmental variables

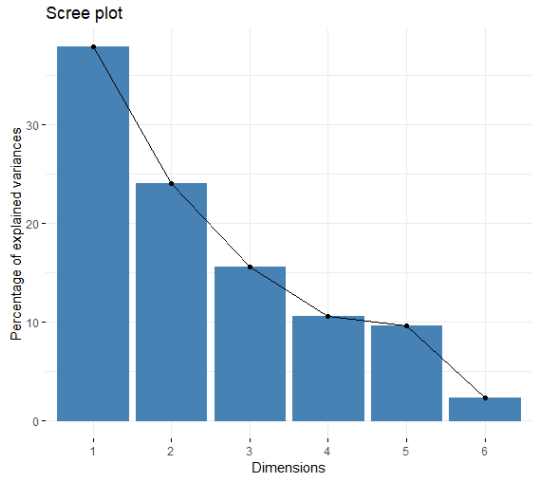


Fig. S4 – Scree plot of PCA analysis for CO_2 fluxes and environmental variables

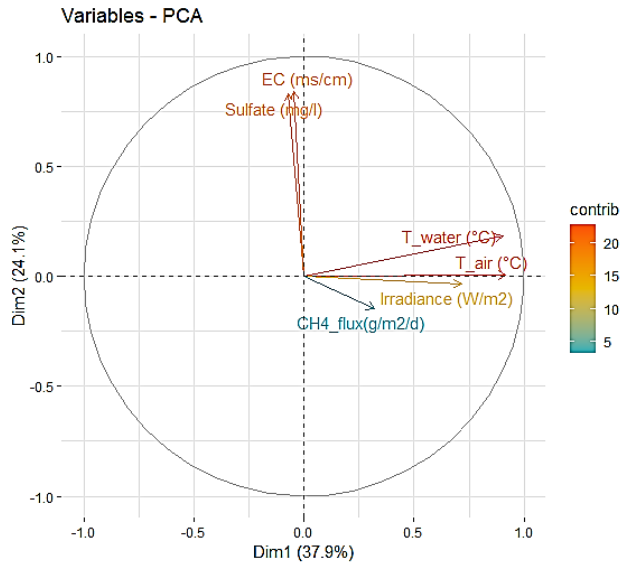


Fig. S5 - Variable correlation plot with related contributions for the PCA of CH_4 fluxes.

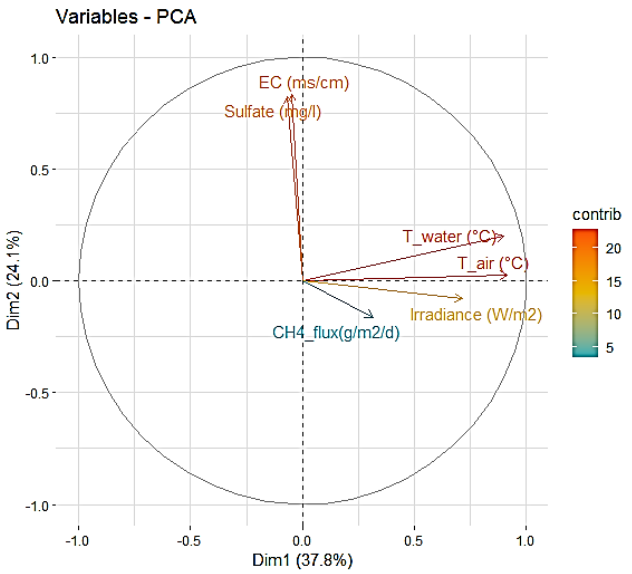


Fig. S6 - Variable correlation plot with related contributions for the PCA of CO_2 fluxes.

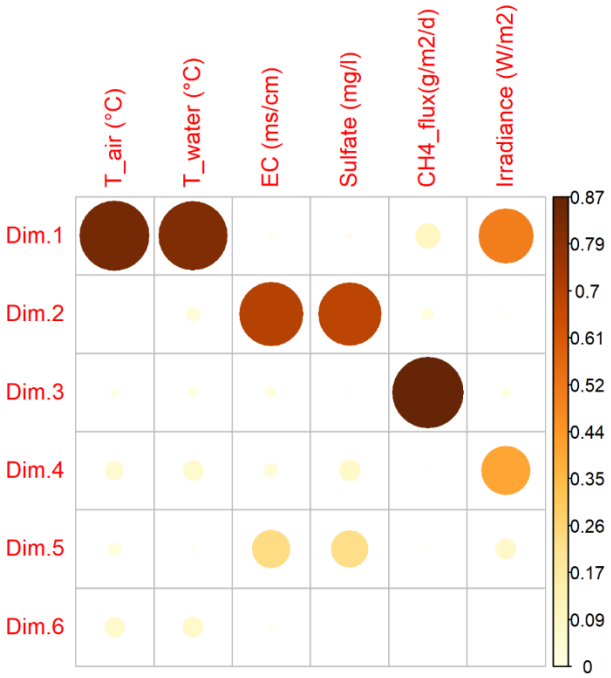


Fig. S7 - Correlation matrix between variables and PC for CH_4 fluxes

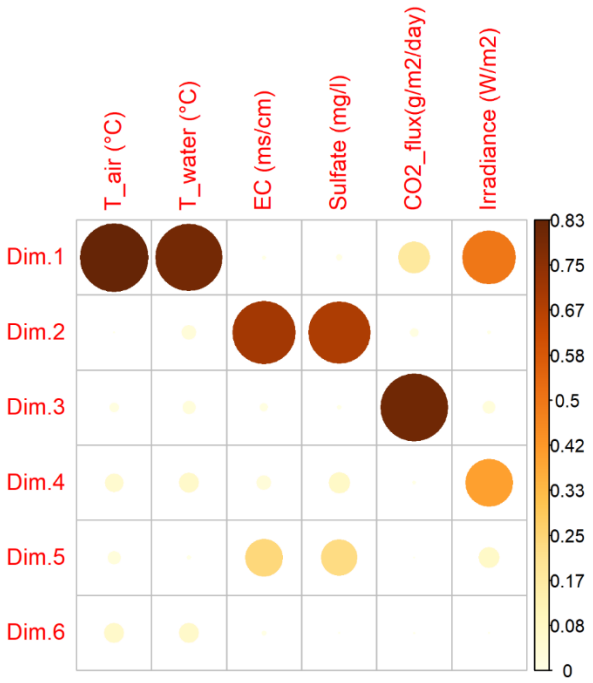


Fig. S8 - Correlation matrix between variables and PC for CO_2 fluxes

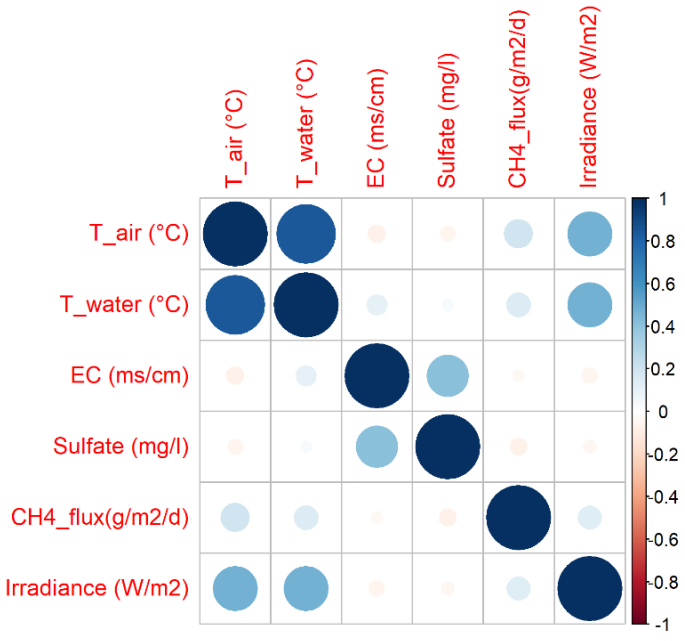


Fig. S9 – Correlation matrix with Pearson's correlation for CH_4 fluxes and environmental variables

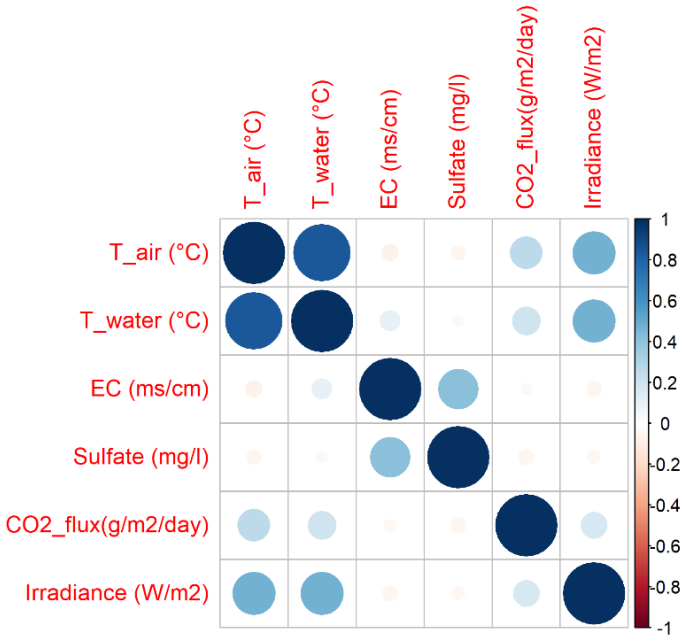
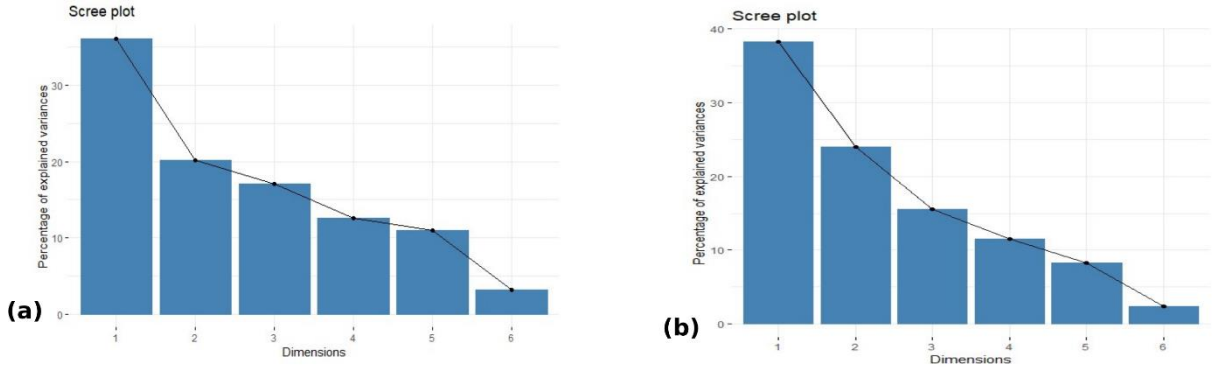


Fig. S10 - Correlation matrix with Pearson's correlation for CO_2 fluxes and environmental variables



S11 - Scree plot of PCA analysis for CH_4 fluxes from standing waters and EC (a), sulphate (b), water column depth and environmental variables

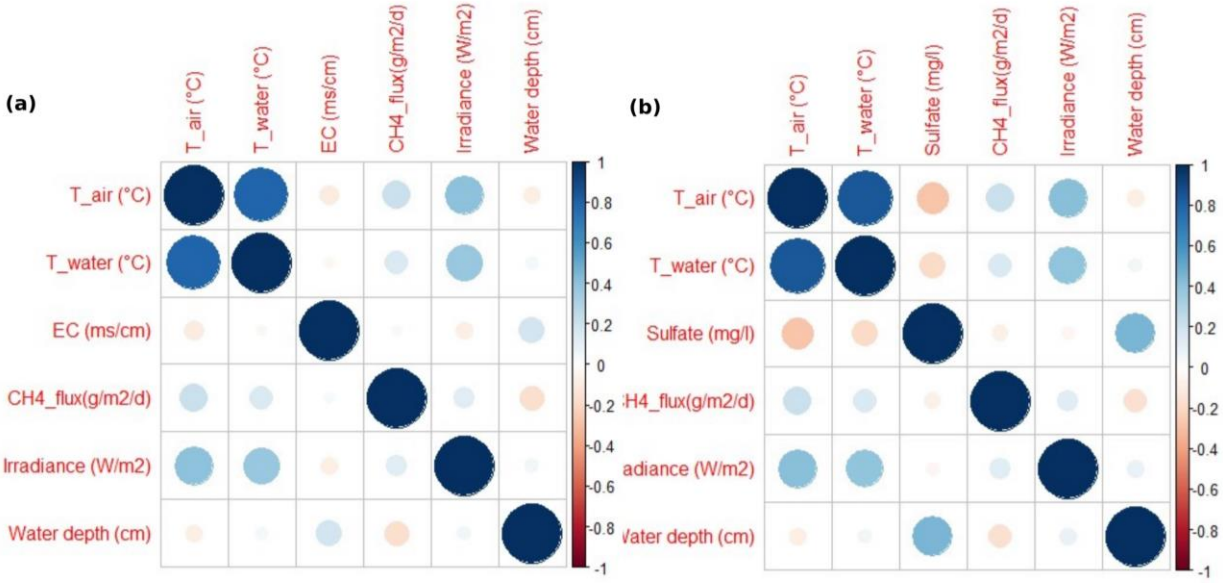
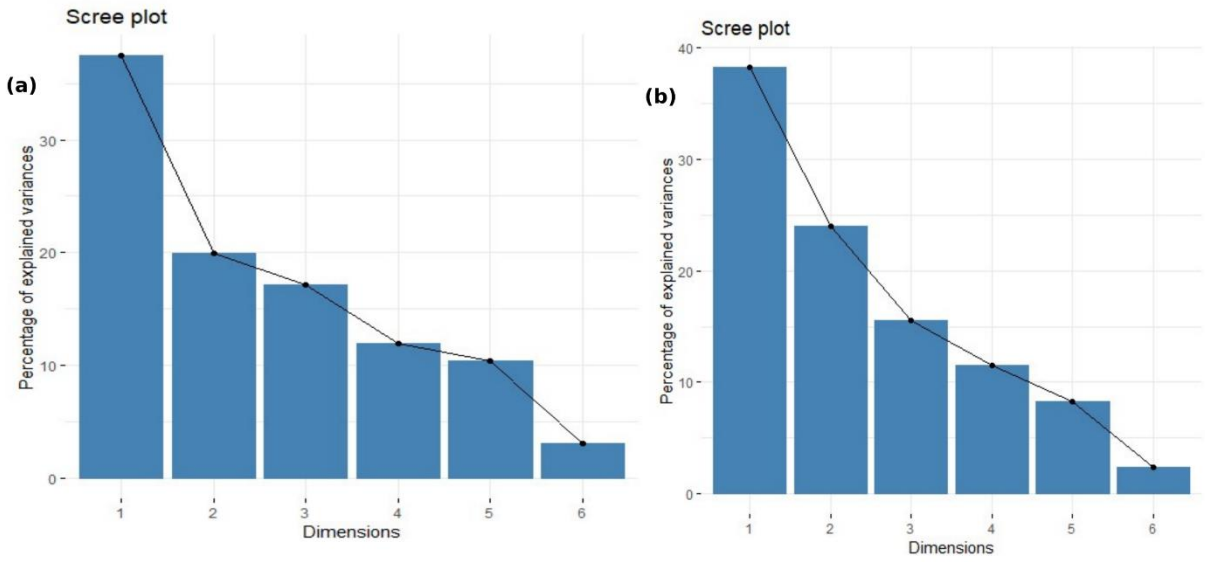


Fig. S12 - Correlation matrix with Pearson's correlation for CH_4 fluxes in flooded areas and EC (a), and SO_4^{-2} (b)



S13 - Scree plot of PCA analysis for CO_2 fluxes from standing waters and EC (a), sulphate (b), water column depth and environmental variables

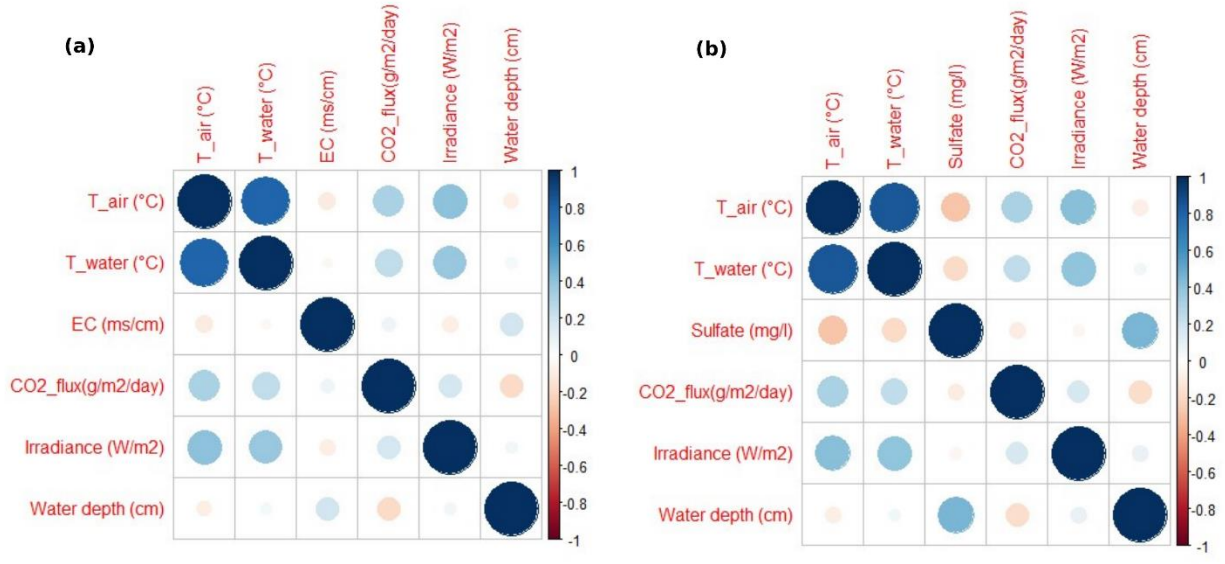


Fig. S14 - Correlation matrix with Pearson's correlation for CO_2 fluxes in flooded areas and EC (a), and SO_4^{-2} (b)

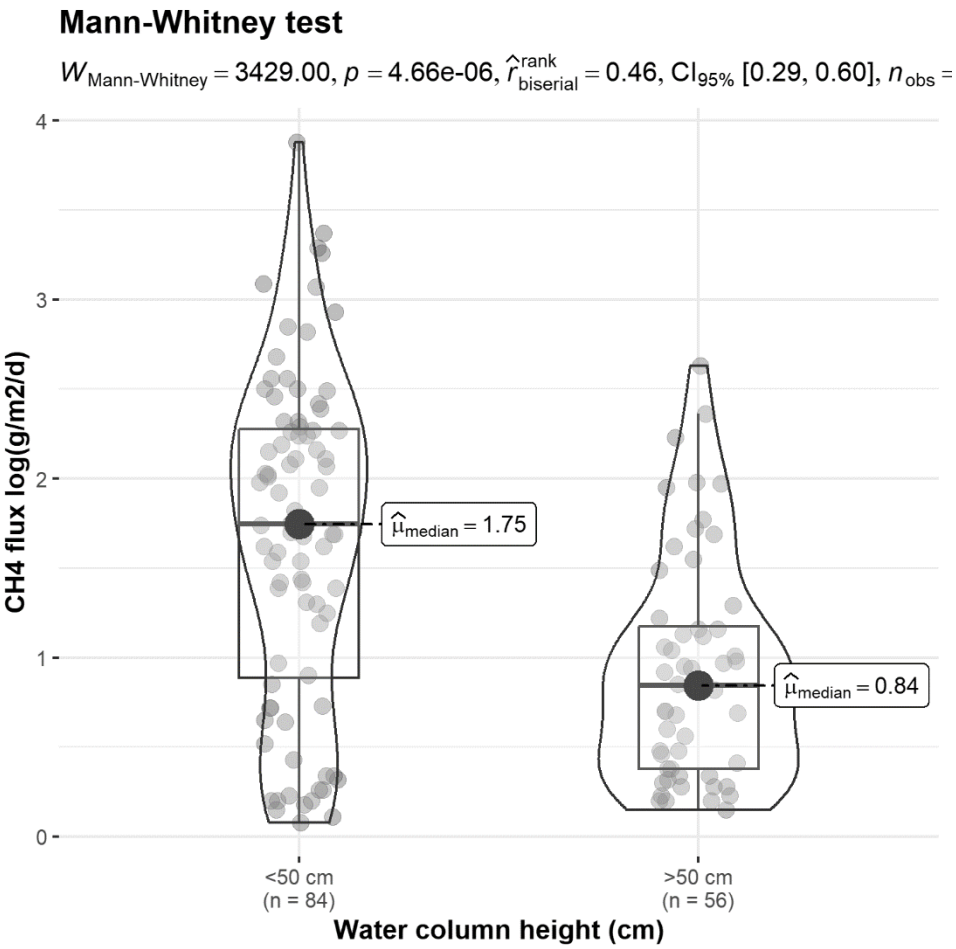


Fig. S15 - Mann Whitney test performed between CH_4 measurements from open waters with inundation levels <50 cm and >50cm. The two group are statistically different (***) with a p= 4.66 e^{-06}

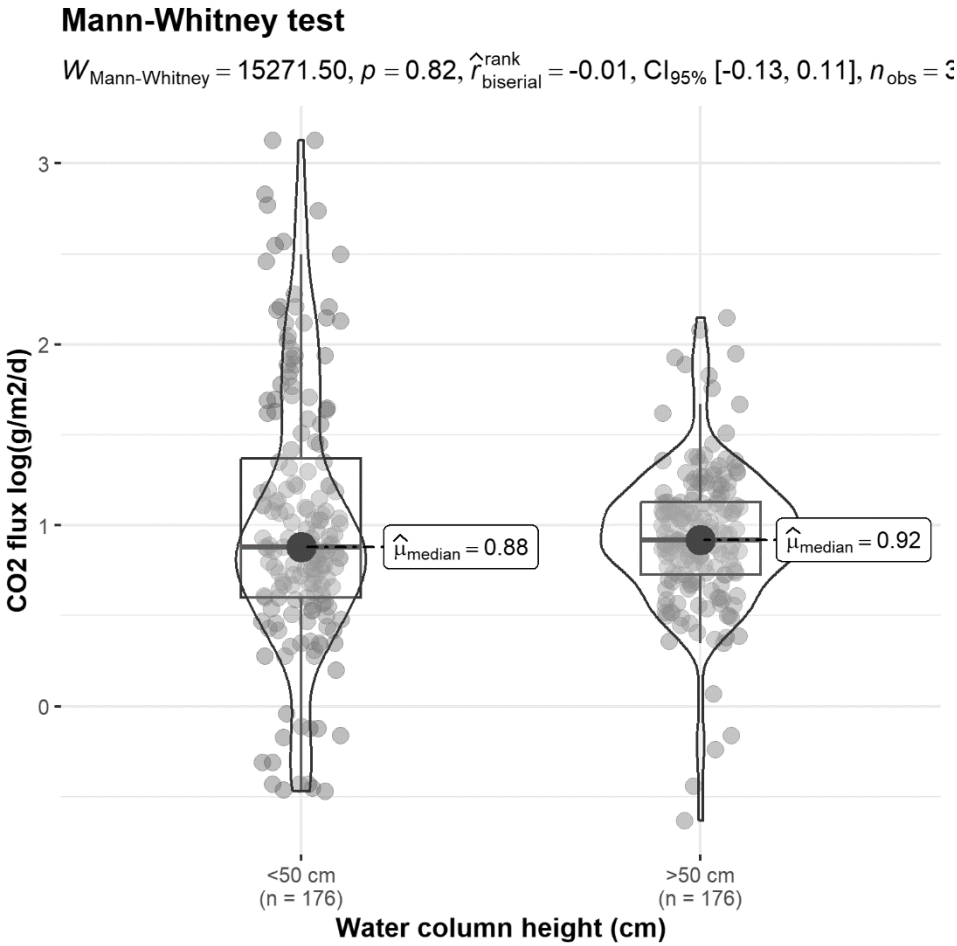


Fig. S16 - Mann Whitney test performed between CO2 measurements from open waters with inundation levels <50 cm and >50cm. The two group are not statistically different with a p= 0.82.