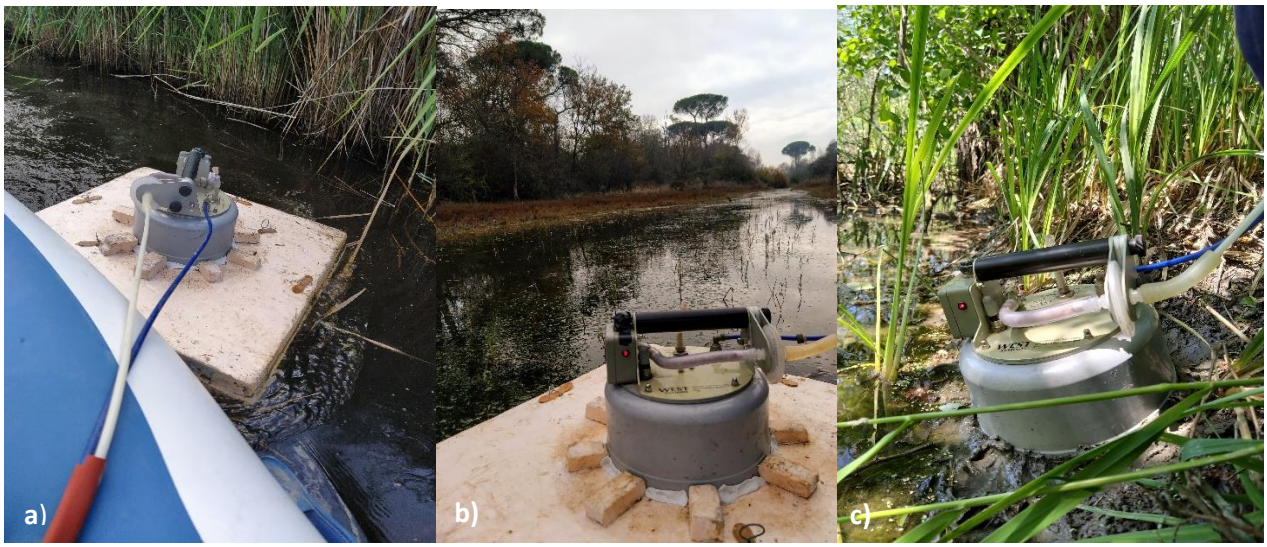

Fig. S1 - Measuring GHGs fluxes with accumulation chamber on (a) deep and (b) shallow water with floating devise, and on (c) flooded soils.

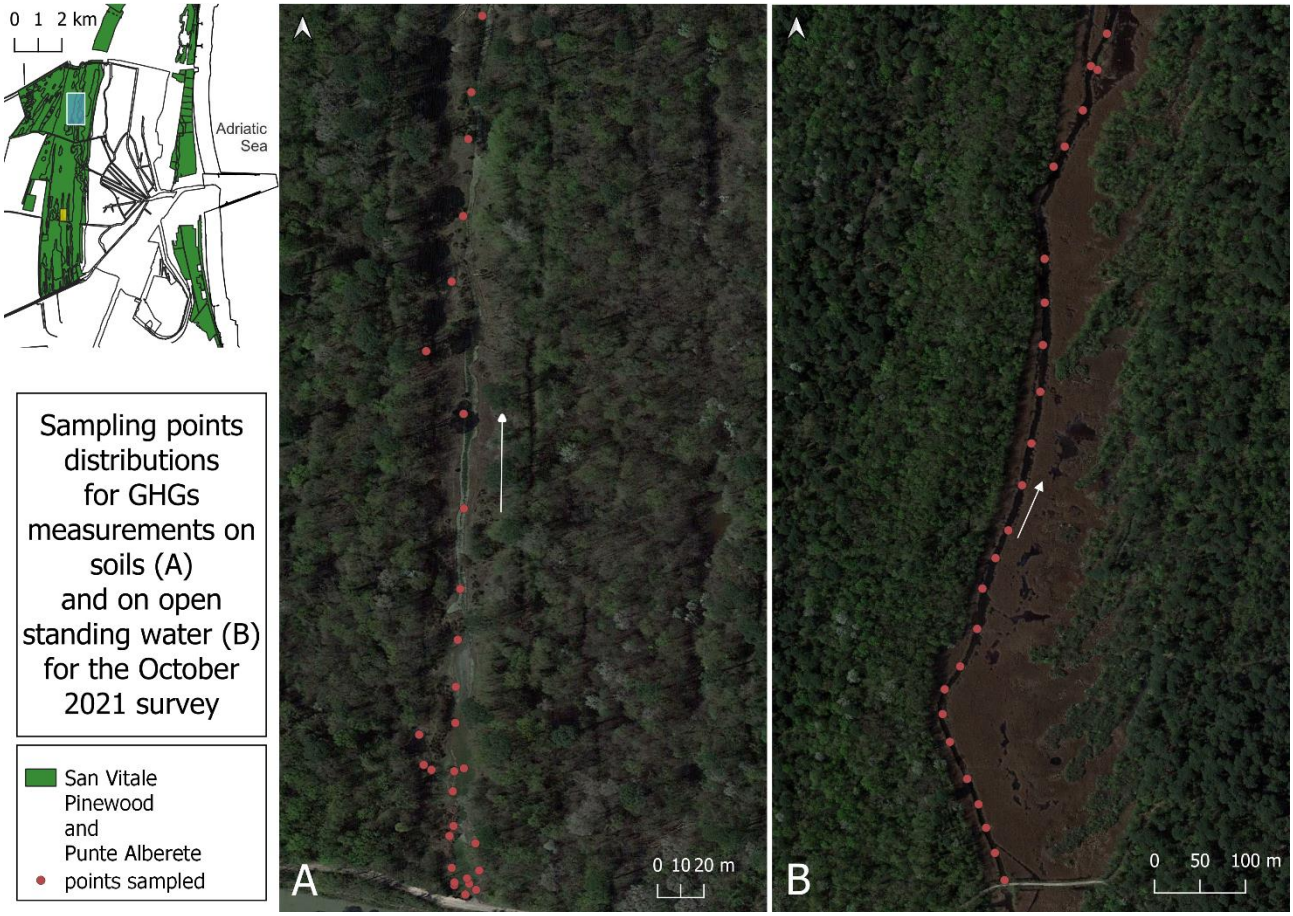

Fig. S2 – Example of distribution of points measurements in both type of sampling: soil (a) and open standing water (b).

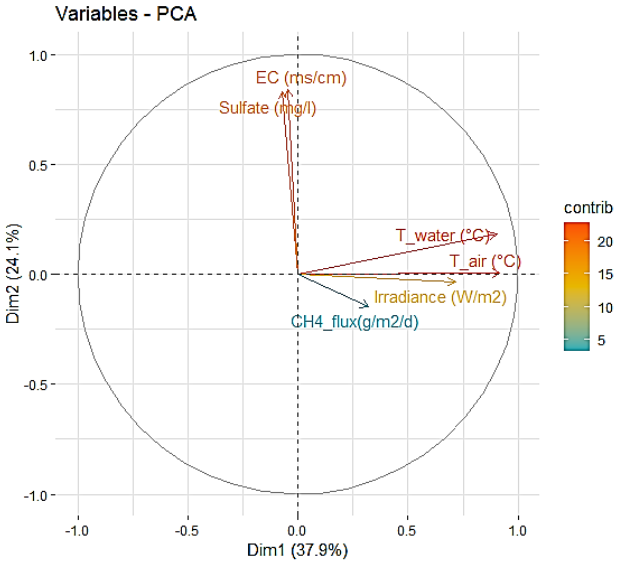

Fig. S3 - Variable correlation plot with related contributions for the PCA of CH_4 fluxes.

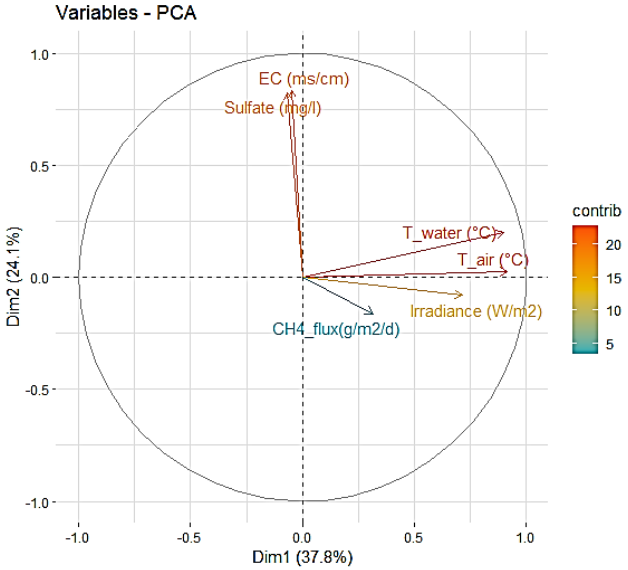

Fig. S4 - Variable correlation plot with related contributions for the PCA of CO_2 fluxes.

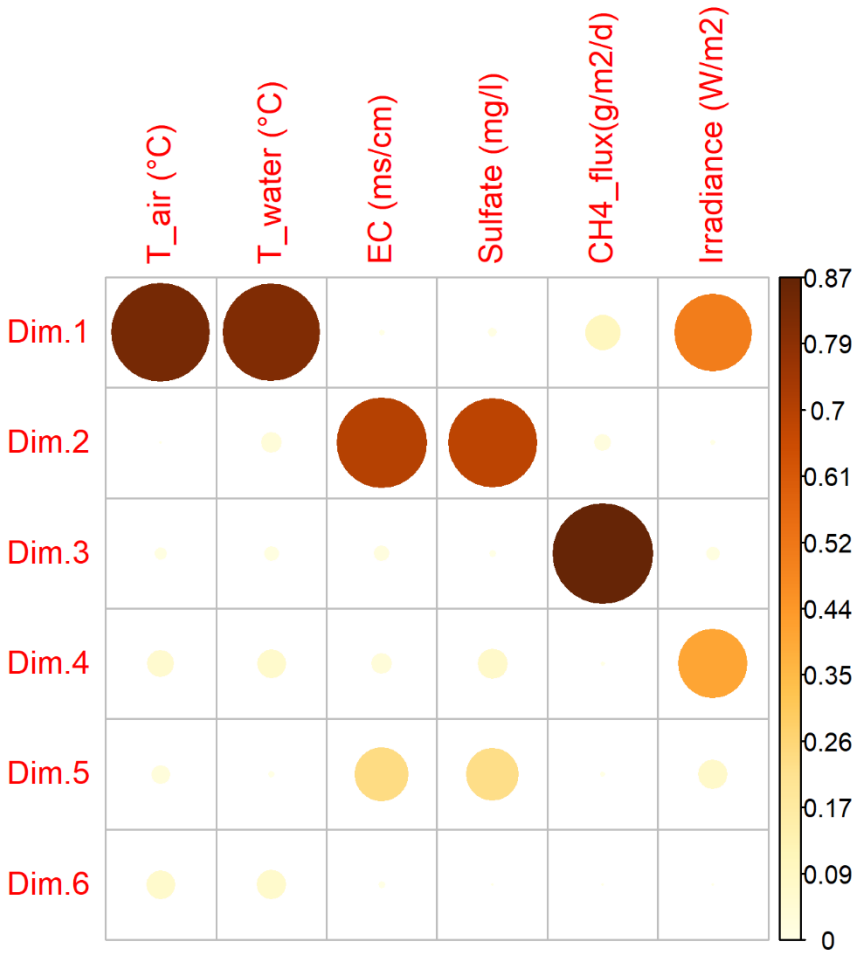

Fig. S5 - Correlation matrix between variables and PC for CH_4 fluxes

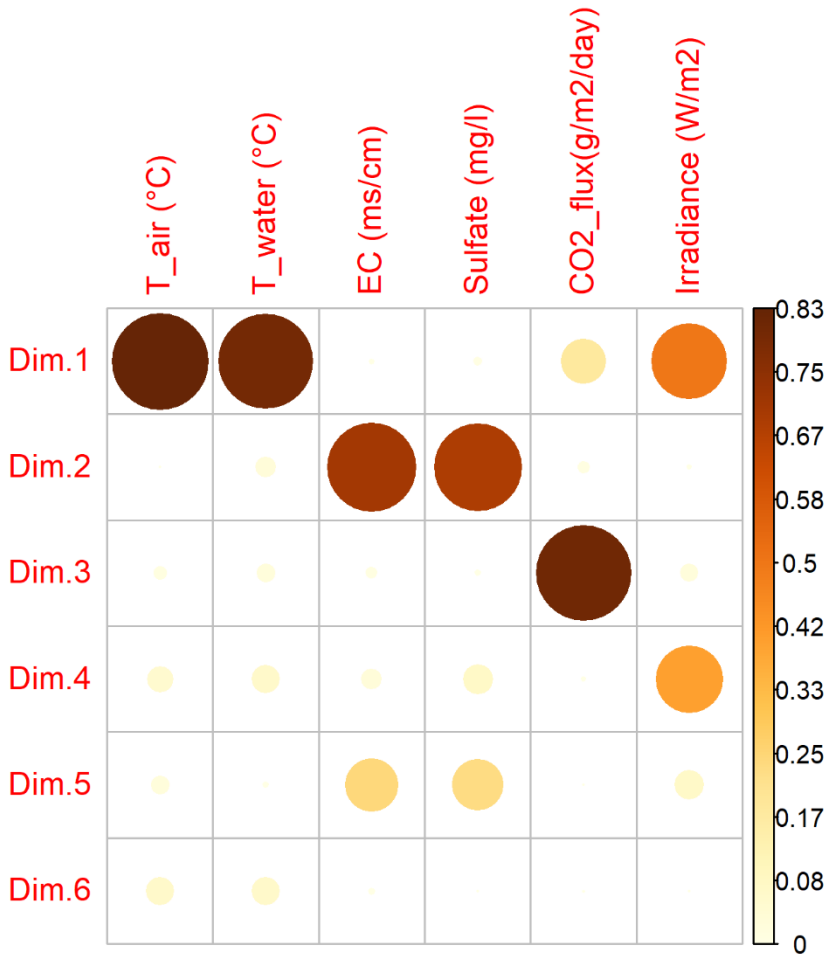

Fig. S6 - Correlation matrix between variables and PC for CO_2 fluxes

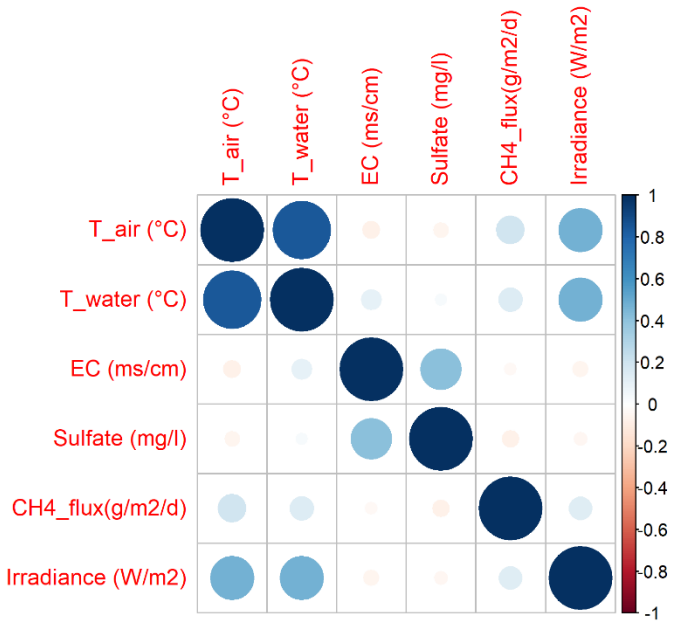

Fig. S7 – Correlation matrix with Pearson's correlation for CH_4 fluxes and environmental variables

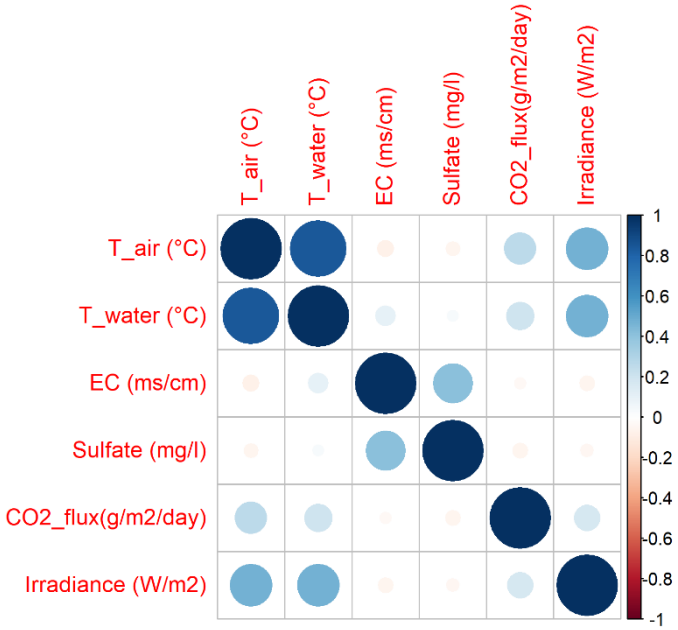

Fig. S8 - Correlation matrix with Pearson's correlation for CO_2 fluxes and environmental variables

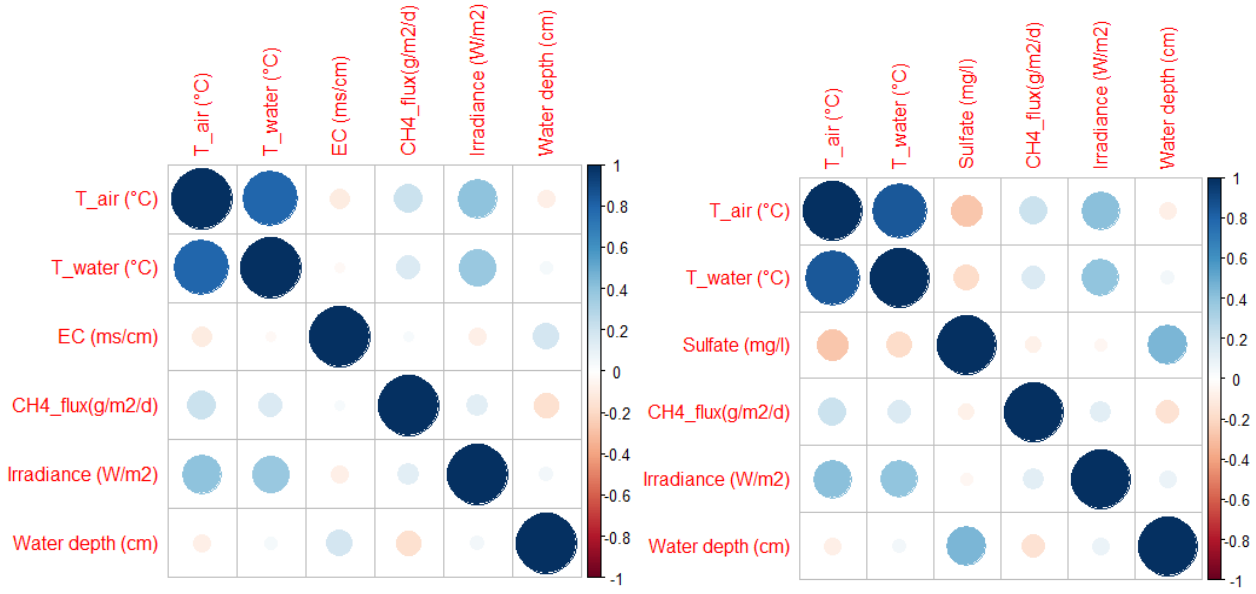

Fig. S9 - Correlation matrix with Pearson's correlation for CH_4 fluxes in flooded areas and EC (a), and SO_4^{-2} (b)

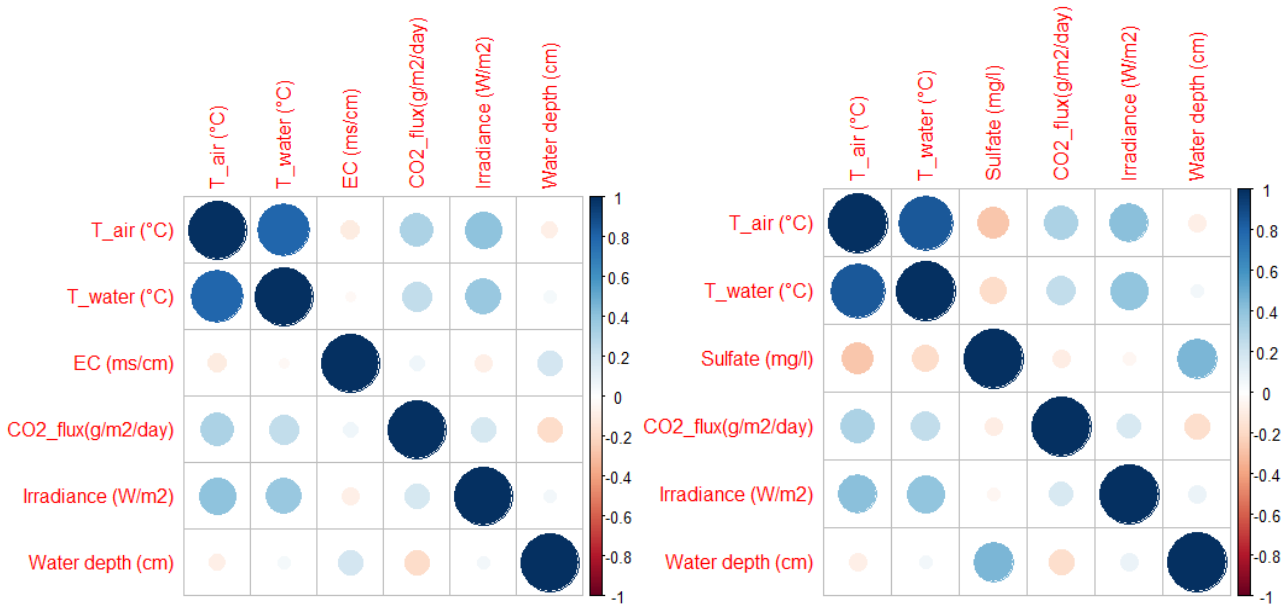

Fig. S10 - Correlation matrix with Pearson's correlation for CO_2 fluxes in flooded areas and EC (a), and SO_4^{-2} (b)

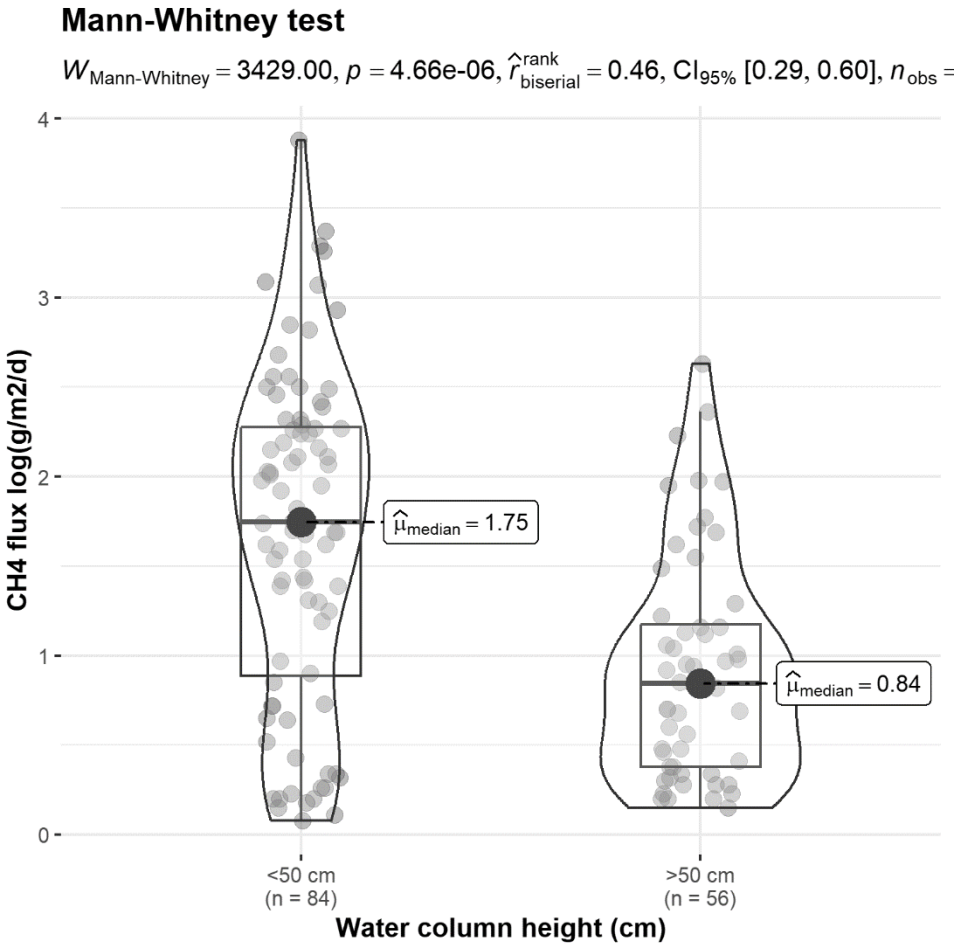

Fig. S11 - Mann Whitney test performed between CH_4 measurements from open waters with inundation levels <50 cm and >50cm. The two group are statistically different (***) with a p= 4.66 e^{-06}

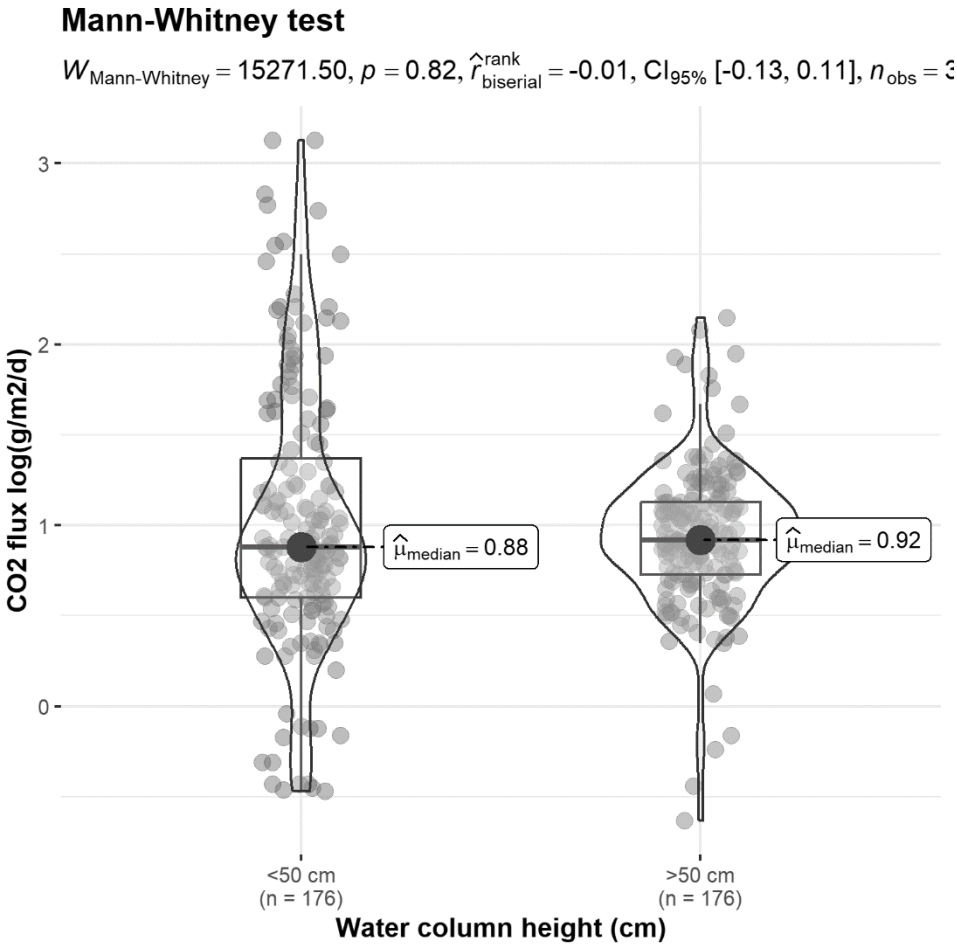

Fig. S12 - Mann Whitney test performed between CO2 measurements from open waters with inundation levels <50 cm and >50cm. The two group are not statistically different with a p= 0.82.