Fig. S1. Calibration curve of Absorption coeffiicient at 254 nm against Fe connnetration.

DOC - bulk

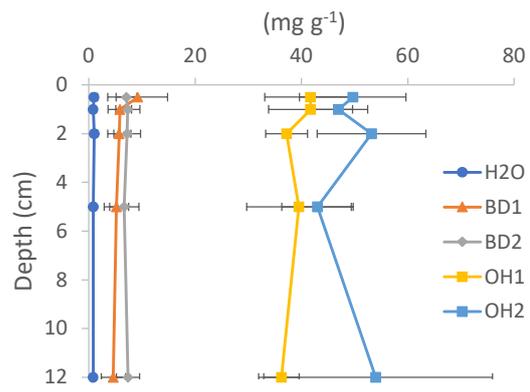



Fig. S2. Mean concentrations of extracted dissolved organic carbon (DOC) in bulk extraction. Values are relevant to means and SD of four sediment cores along the vertical profile of Landstejn reservoir.

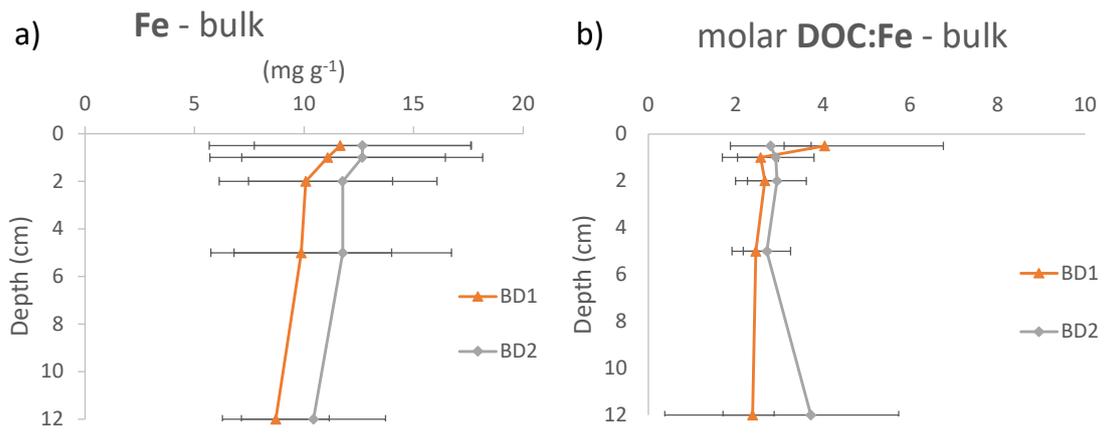



Fig. S3. Concentration of Fe extracted by BD1 and BD2 (a) and Molar ratios of DOC and Fe extracted by BD1 and BD2 in bulk extraction (b). Values are relevant to means and SD of four sediment cores along the vertical profile of Landstejn reservoir.

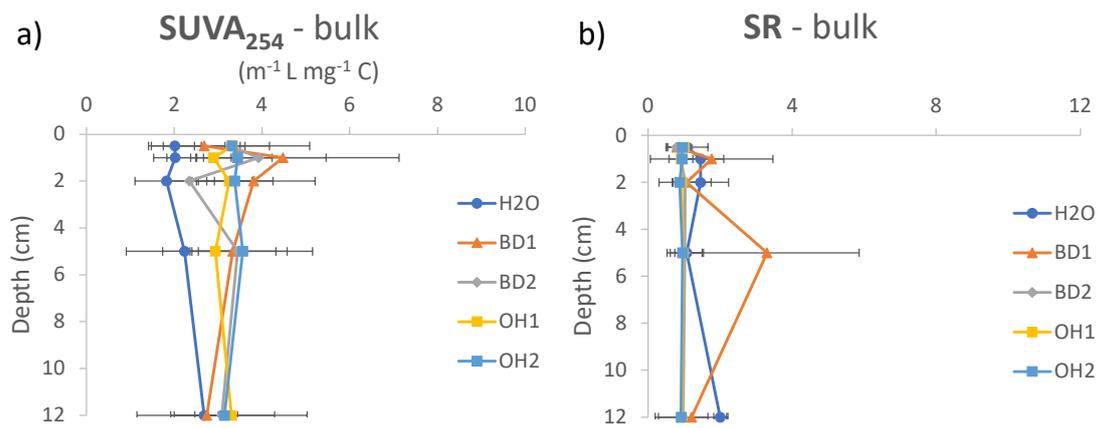



Fig. S4.. Values of SUVA$_{254}$ as a proxy to aromaticity (a) and SR, proxy to molecular weight (b) for individual extractions in bulk extraction scheme. Values are relevant to means and SD of four sediment cores along the vertical profile of Landstejn reservoir.

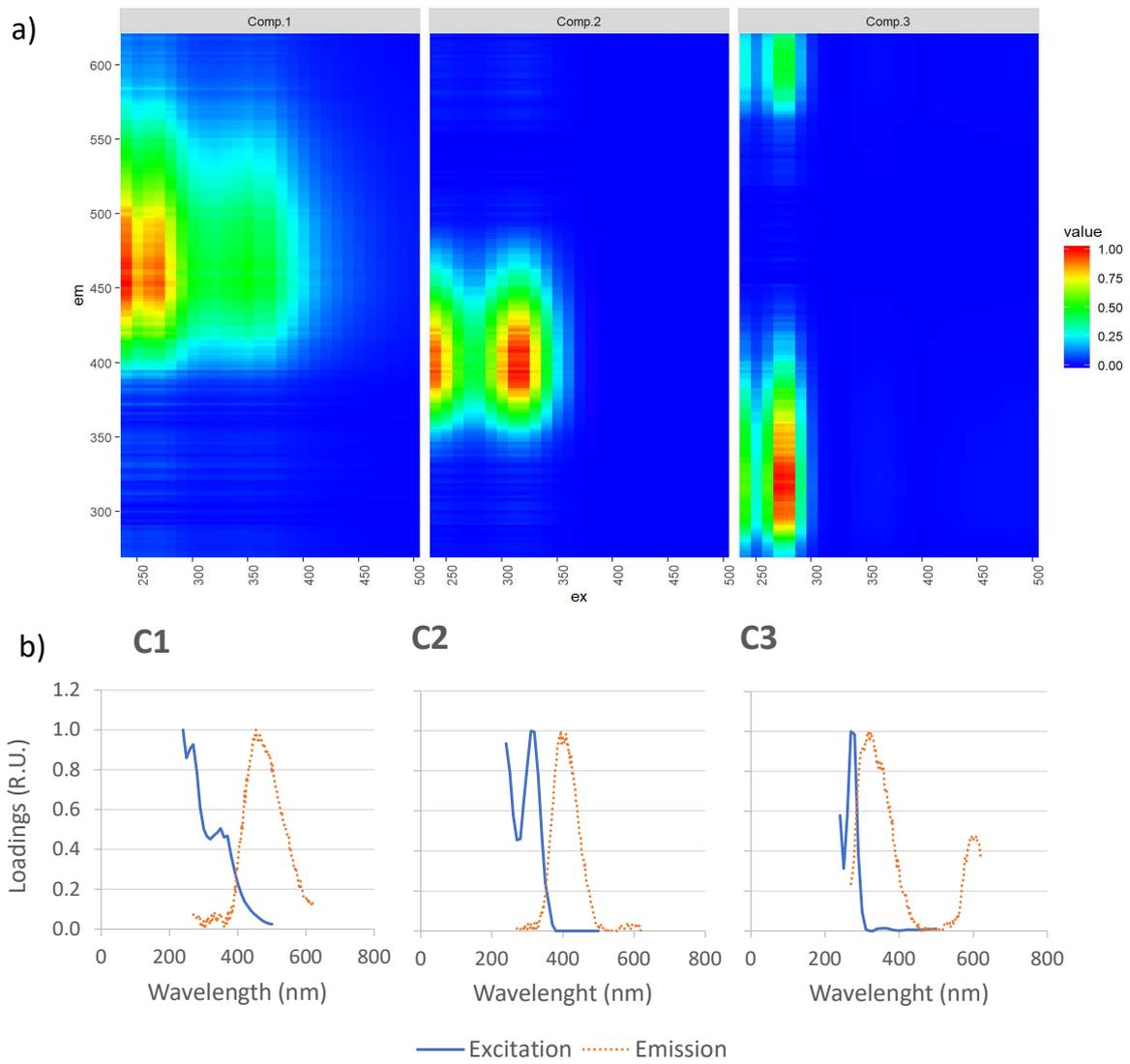
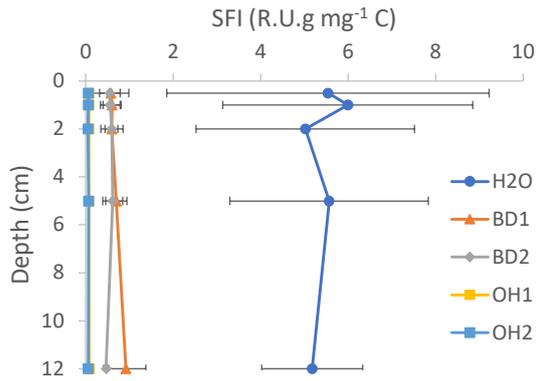
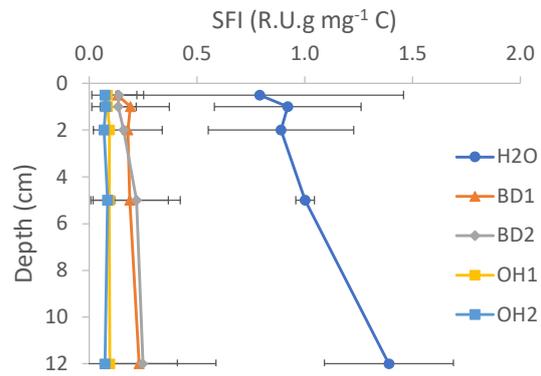



Fig. 5. Contours of identified components processed by EEM PARAFAC (a). Loadings of EEM PARAFAC identified components (b).

C1 - bulk

C2 - bulk

C3 - bulk

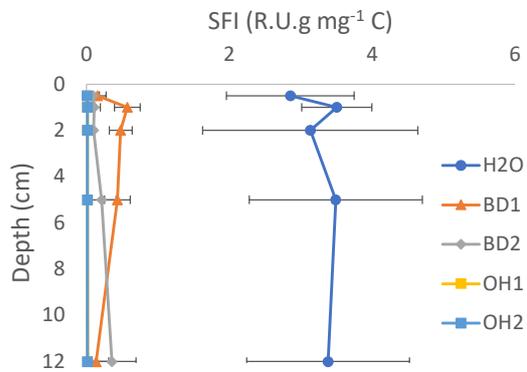



Fig. S6. Specific fluorescence intensity – SFI (given as the ratio of the fluorescence intensity in R. U. to the DOC concentration in mg g^{-1}) of identified components (C1, C2 and C3) for individual extractions in the bulk extraction scheme. Values are relevant to means and SD of four sediment cores along the vertical profile of Landstejn reservoir.