

## **Supplemental Information: Photo-reactivity of natural dissolved organic matter from fresh to marine waters in the Florida Everglades, USA**

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This supplemental information includes six figures referenced in the main body of the text.

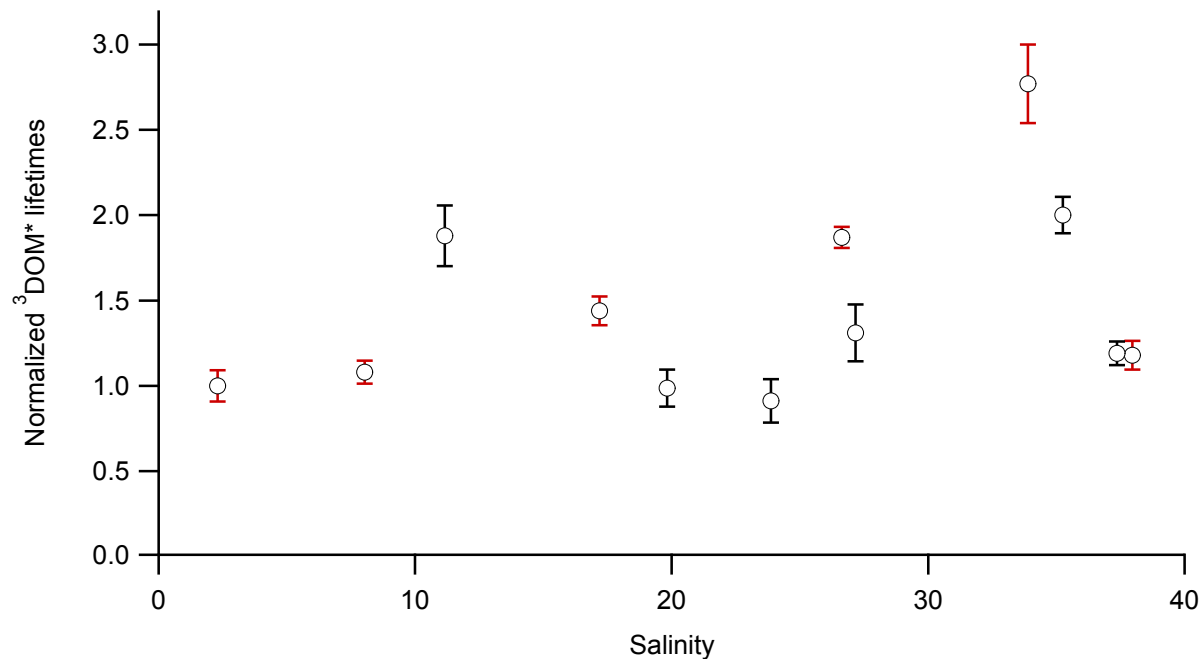


Figure S1:  $^3\text{DOM}^*$  lifetimes in the Harney River (red, open) and Taylor Slough (black, filled) samples normalized to the  $^3\text{DOM}^*$  lifetime of the freshwater sample of the Harney River. Error bars are calculated from standard deviations of the regression analysis (Equation 8).

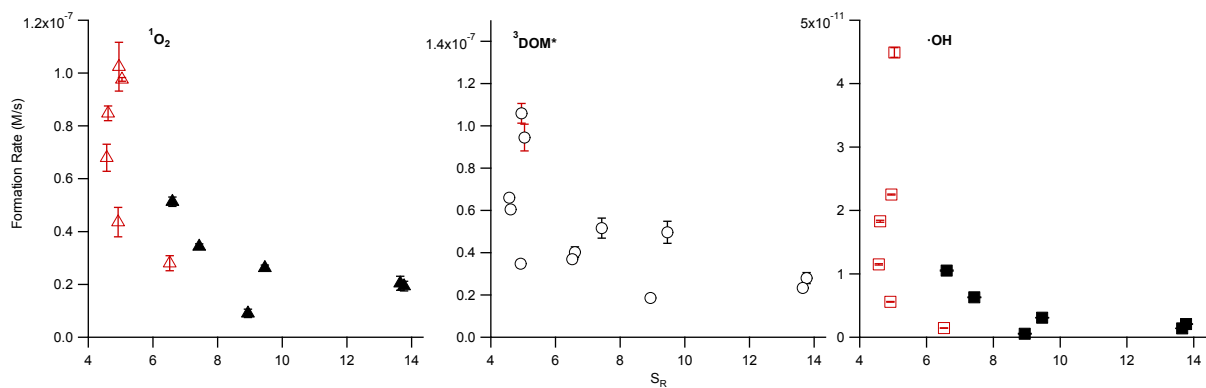


Figure S2: Formation rates of (a)  $^1\text{O}_2$  (triangles) and (b)  $^3\text{DOM}^*$  (circles), and (c)  $\bullet\text{OH}$  (squares) in relation to the spectral slope ratio,  $S_R$  of the Harney River (red, open) and Taylor Slough (black, filled). Error bars represent standard deviations of triplicate experiments for  $^1\text{O}_2$ ,  $\bullet\text{OH}$ , and  $\text{CO}_3^{\bullet-}$ .  $^3\text{DOM}^*$  error bars are calculated from standard deviations of the regression analysis (Equation 8).

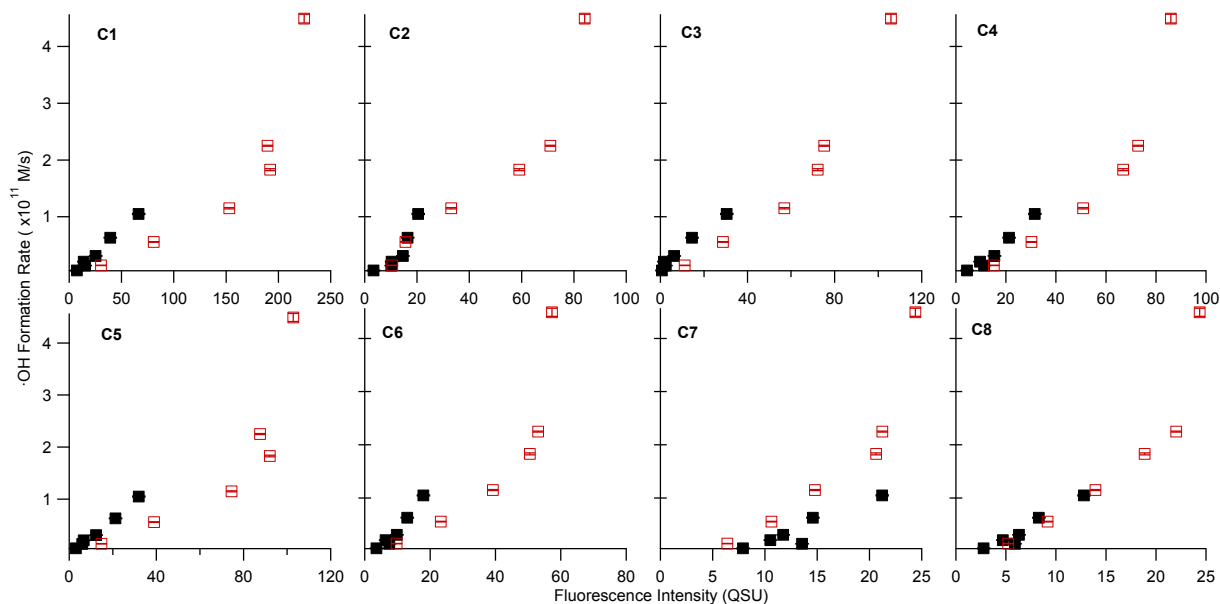


Figure S3: Formation rates of  $\bullet\text{OH}$  in the Harney River (red, open) and Taylor Slough (black, filled) as related to fluorescence intensity (QSU) of the different DOM components as identified by PARAFAC analysis. Error bars represent standard deviations of triplicate experiments.

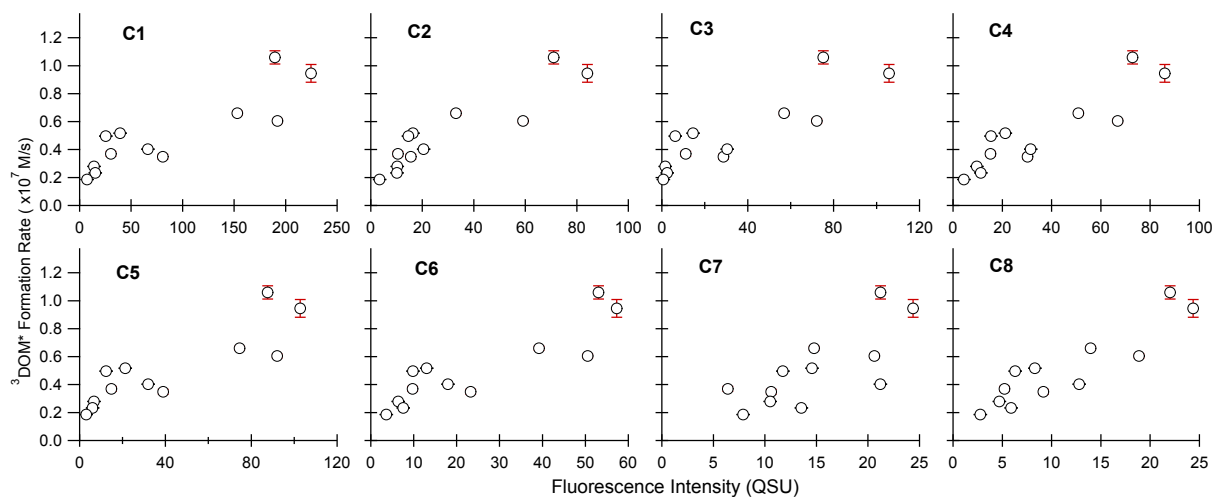


Figure S4: Formation rates of  $^3\text{DOM}^*$  in the Harney River (red, open) and Taylor Slough (black, filled) as related to fluorescence intensity (QSU) of the different DOM components as identified by PARAFAC analysis. Error bars are calculated from standard deviations of the regression analysis (Equation 8).

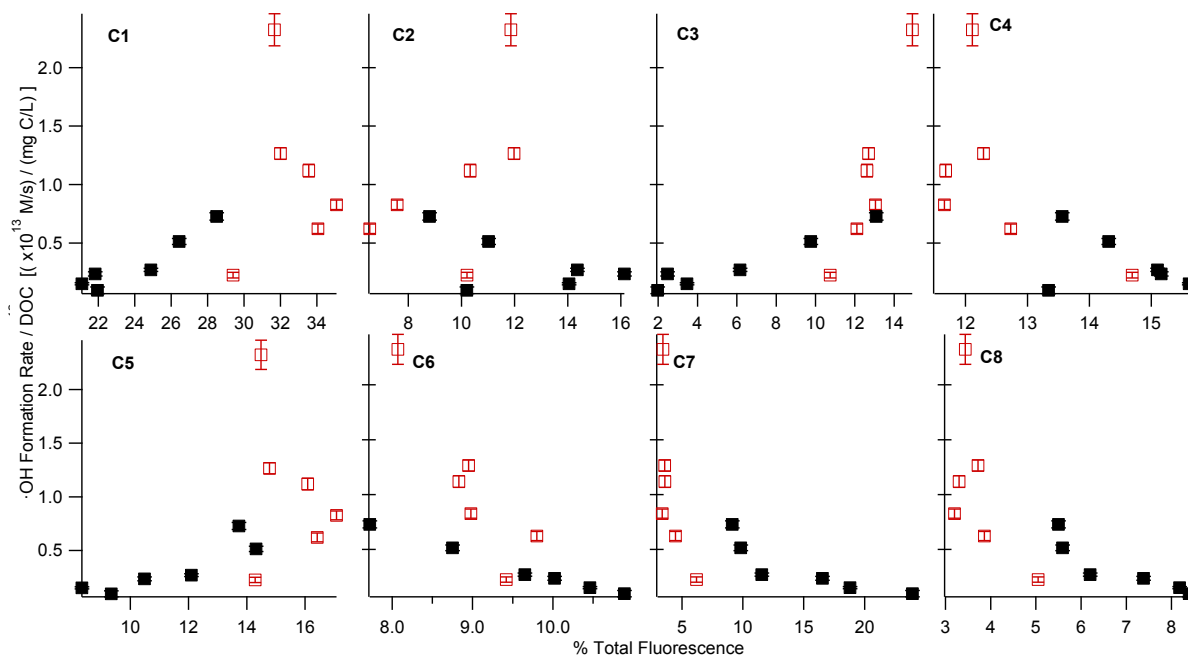


Figure S5: Normalized formation rates of  $\bullet\text{OH}$  in the Harney River (red, open) and Taylor Slough (black, filled) as related to percent total fluorescence intensity of the different DOM components as identified by PARAFAC analysis. Error bars represent standard deviations of triplicate experiments

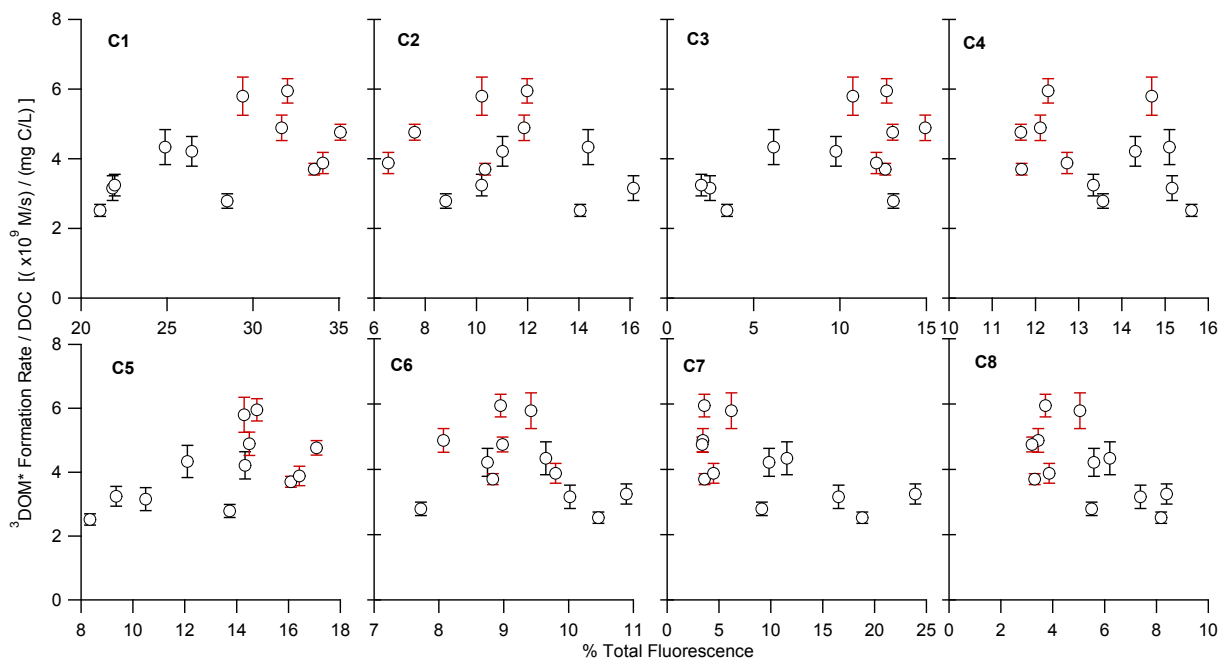


Figure S6: Normalized formation rates of  $^3\text{DOM}^*$  in the Harney River (red, open) and Taylor Slough (black, filled) as related to percent total fluorescence intensity of the different DOM components as identified by PARAFAC analysis. Error bars are calculated from standard deviations of the regression analysis (Equation 8).