

Dear Dr. Yuan Shen,

thank you for your valuable comment and the hint at the paper of Peter et al. (2012) with the data to calculate the marine DOM specific degradation index. We have calculated the marine DOM-DI for all water samples and found that it is in a similar range as the DI and that it does not show any trend with water depth. We have included the DOM-DI in the presentation of biogeochemical indicators (lines 281-285), results (lines 356-359; lines 426-428) and discussion (line 674-678) and have included a new supplement S4 which shows that there are no depth dependent trends in water and pore water samples. This furthermore supports our statement that total dissolved amino acids show no depth dependent changes in AA composition (line 655) in our data set and with the hydrolysis conditions we used.

Best regards,

Birgit Gaye