



Supplement of

Limited physical protection leads to high organic carbon reactivity in anoxic Baltic Sea sediments

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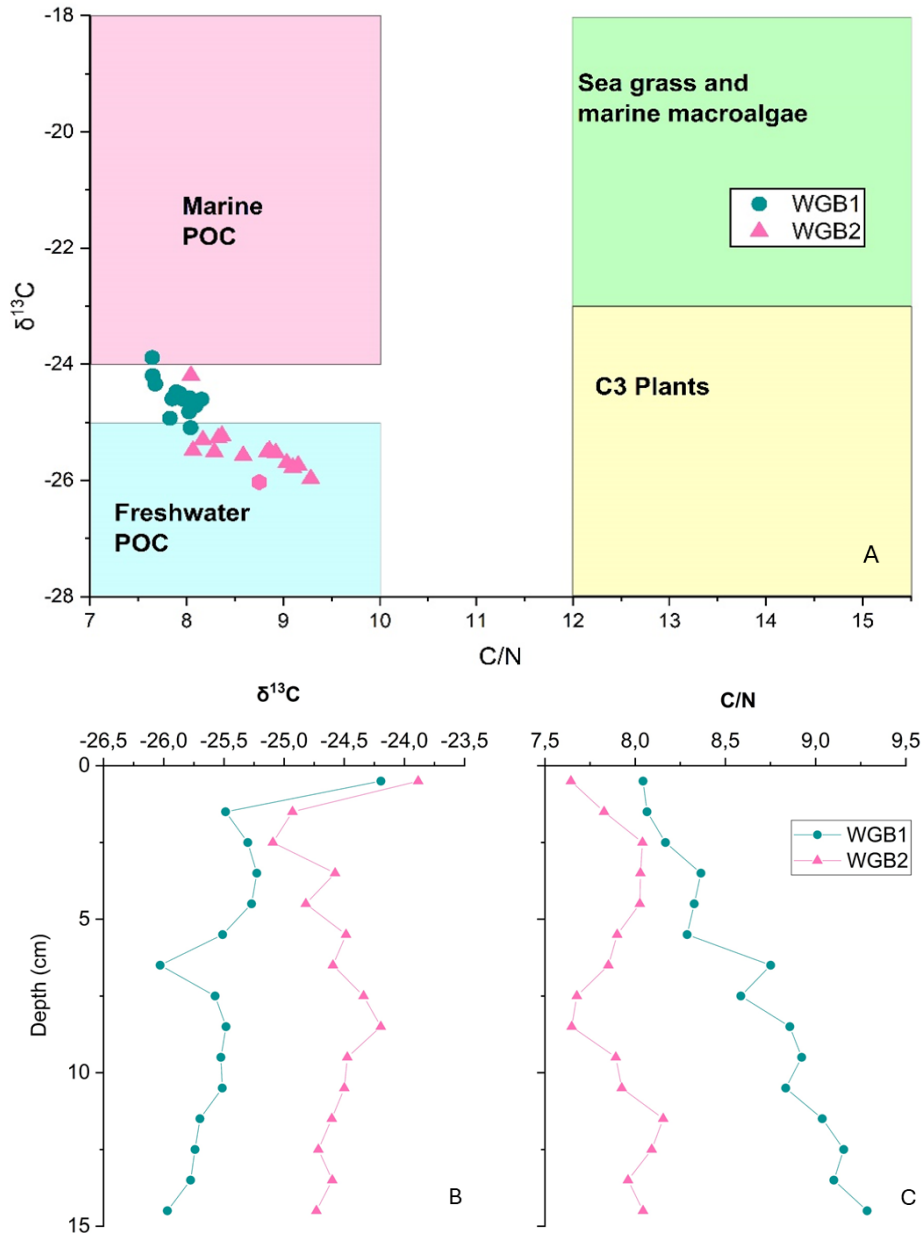


Figure S1: A) $\delta^{13}\text{C}$ and C/N ranges for organic inputs to coastal environment (data compiled from Lamb et al., 2006 and Khan et al., 2015), and WGB1 and WGB2 organic matter signature. B) $\delta^{13}\text{C}$ and C) C/N downcore profiles.

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Table S1: Steps for OC-Fe extractions. On the left the citrate bicarbonate dithionite extraction (CBD) and on the right the control extraction

| | Citrate bicarbonate dithionite extraction | Control extraction |
|--------|--|---|
| Step 1 | 250 mg of sample + 15 mL of 0.27 M $\text{Na}_3\text{C}_6\text{H}_5\text{O}_7\cdot\text{H}_2\text{O}$ and 0.11 M NaHCO_3 (water bath at 80°C) | 250 mg of sample + 15 mL of 1.6 M NaCl and 0.11 M NaHCO_3 (water bath at 80°C) |
| Step 2 | + 250 mg $\text{Na}_2\text{S}_2\text{O}_4$, 15 minutes at 80°C Centrifuge and collect supernatant | + 220 mg NaCl , 15 minutes at 80°C Centrifuge and collect supernatant |
| Step 3 | +10 mL ASW x3 Centrifuge and collect supernatant | +10 mL ASW x3 Centrifuge and collect supernatant |
| | The solutions were mixed all together (45 ml total) and acidified with 100 μL HCl 32% | The solutions were mixed all together (45 ml total) and acidified with 100 μL HCl 32% |

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