



*Supplement of*

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

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## Limited Physical Protection Leads To High Organic Carbon Reactivity in Anoxic Baltic Sea Sediments

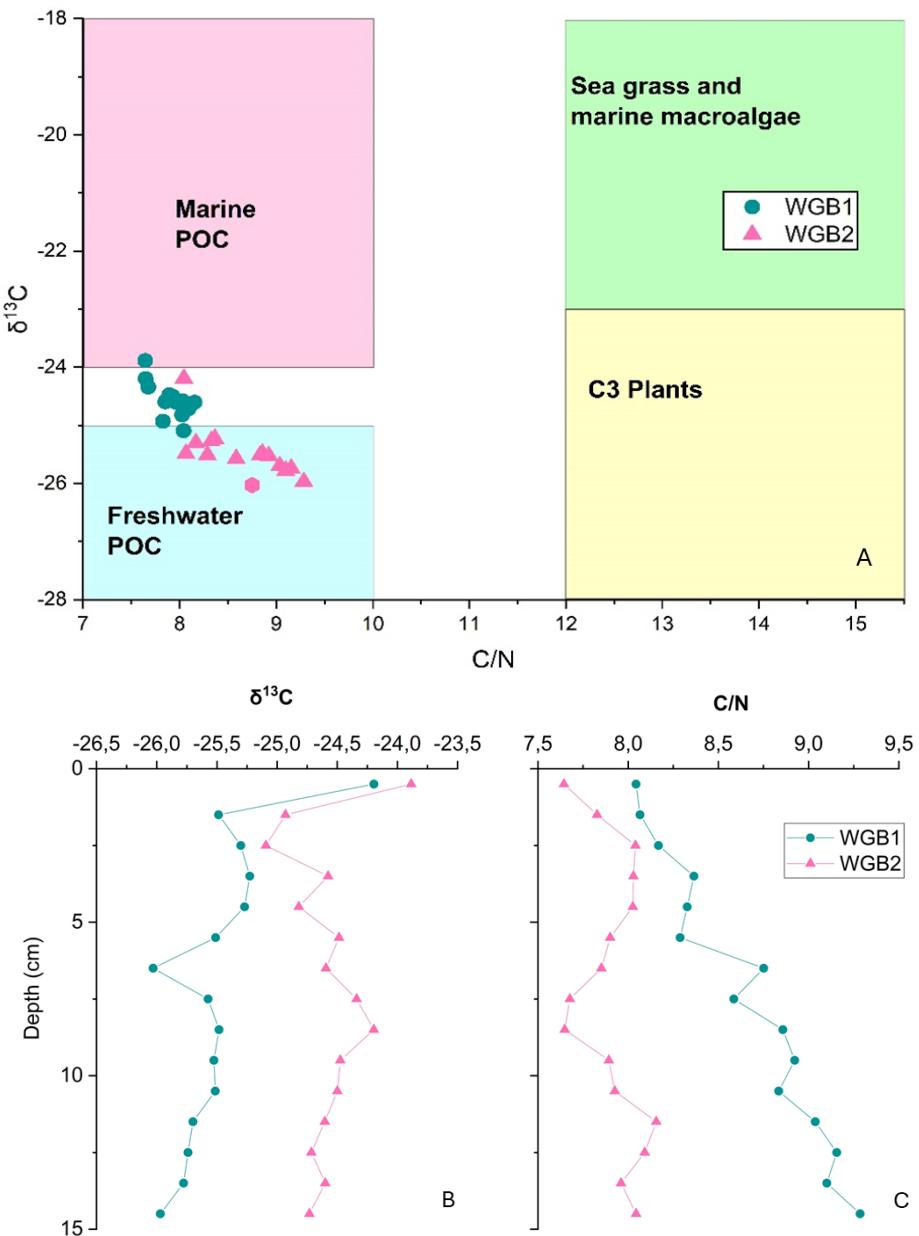


Figure S1: A)  $\delta^{13}\text{C}$  and C/N ranges for organic inputs to coastal environment (data compiled from Lamb et al., 2006 and Khan et al., 2015), and WGB1 and WGB2 organic matter signature. B)  $\delta^{13}\text{C}$  and C) C/N downcore profiles.

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

	<b>Citrate bicarbonate dithionite extraction</b>	<b>Control extraction</b>
<b>Step 1</b>	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 $\text{NaHCO}_3$ (water bath at 80°C)	250 mg of sample + 15 mL of 1.6 M NaCl and 0.11 M $\text{NaHCO}_3$ (water bath at 80°C)
<b>Step 2</b>	+ 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
<b>Step 3</b>	+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 $\mu\text{L}$ HCl 32%		The solutions were mixed all together (45 ml total) and acidified with 100 $\mu\text{L}$ HCl 32%