

Supplement of Biogeosciences, 17, 4223–4245, 2020
<https://doi.org/10.5194/bg-17-4223-2020-supplement>
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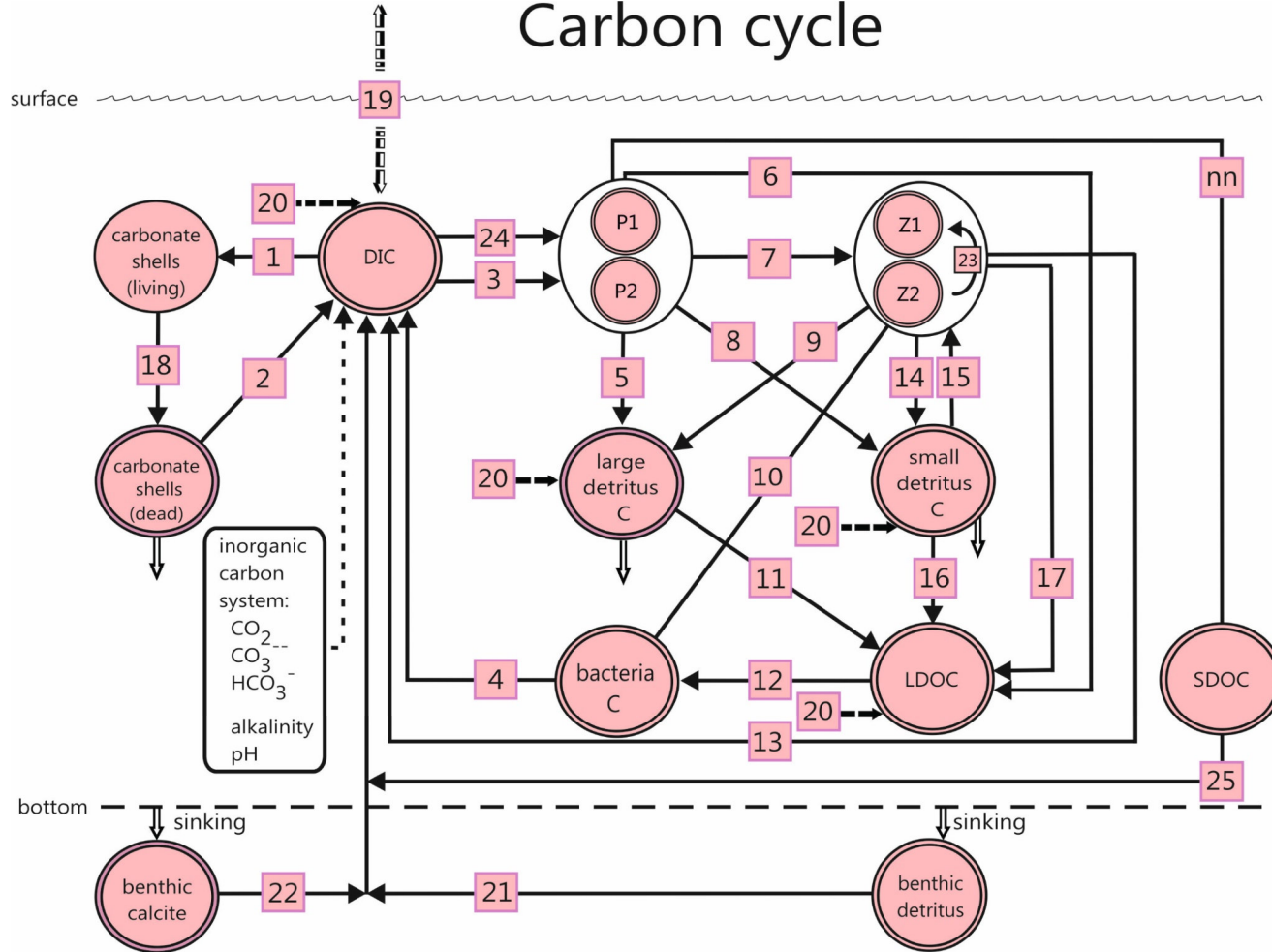
The impact of intertidal areas on the carbonate system of the southern North Sea

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Carbon cycle



1. Calcification
2. Dissolution of carbonate shells
3. DIC uptake by phytoplankton
4. Bacterial remineralisation and respiration
5. Loss
6. Exudation
7. Grazing of zooplankton
8. Loss
9. Loss
10. Grazing
11. Decay
12. Uptake
13. Respiration
14. Fecal pellets production
15. Grazing
16. Decay
17. Excretion
18. Formation of detritus calcite
19. Air – Sea CO₂ exchange
20. River input
21. Benthic C remineralisation
22. Benthic calcite dissolution
23. Grazing
24. DIC uptake by phytoplankton
25. Decay
26. Exudation (nn)

Figure S1: Diagram of the carbon cycle in ECOHAM