









Baltic-C Third Scientific Study Workshop, Lund University, 08-10 November 2010



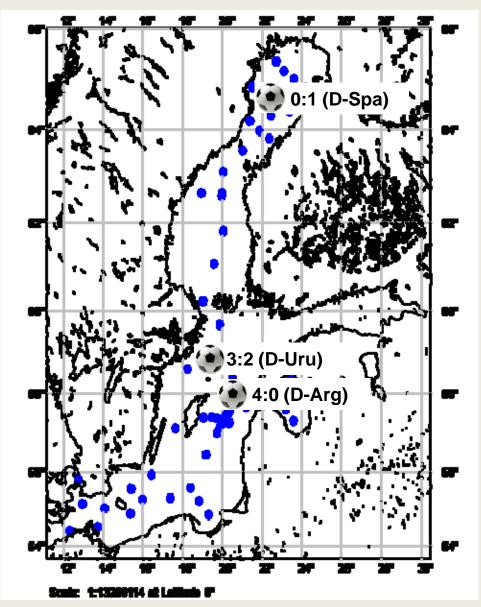


Major goals:

- 1. Validation data for the biogeochemical simulations
- 2. Improved understanding of the biogeochemistry in the Gulfs of Bothnia and Riga
- 3. Assessment of the representivness of the central Gotland Sea station BY15







49 stations

14 "central stations" in the major basins

Parameters:

depth profiles of: T, S

 O_2 , H_2S

NO₃/NO₂

 PO_4

 C_T

and at central stations: A_{T}

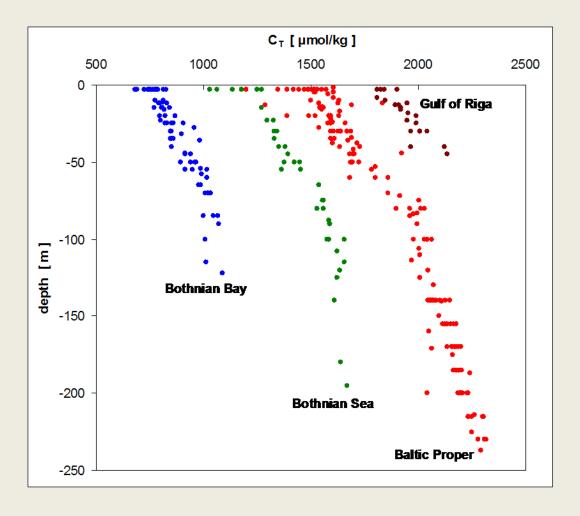
 NH_4

continuously recording of surface water pCO₂





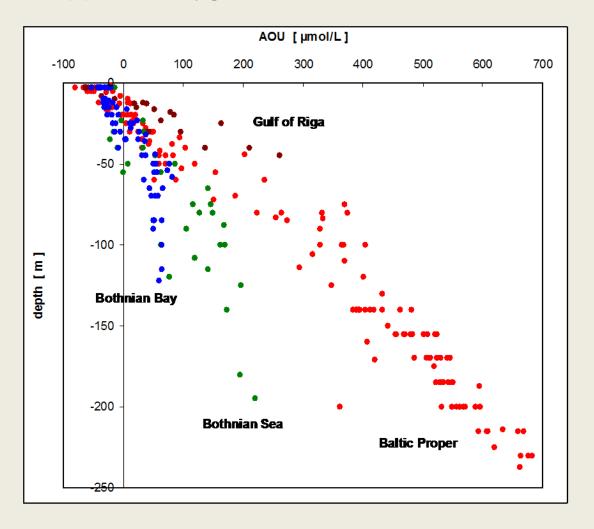
Total CO₂ (C_T) in different Baltic regions







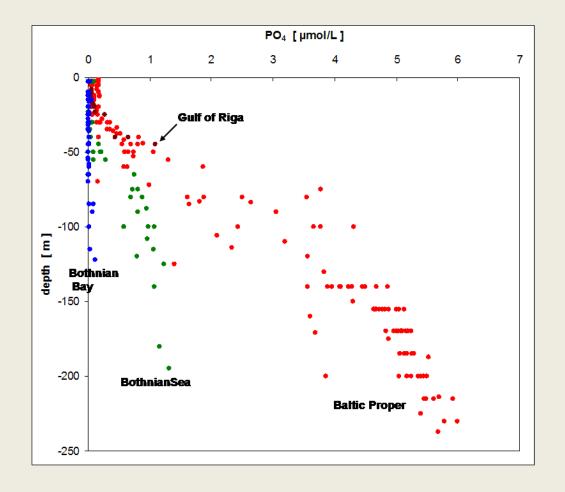
Apparent oxygen utilization







Dissolved phosphate in different Baltic regions





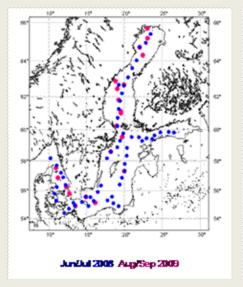


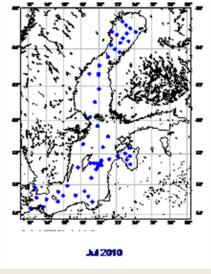


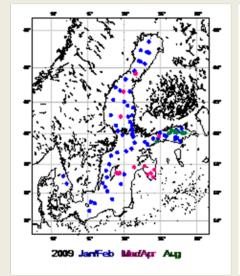


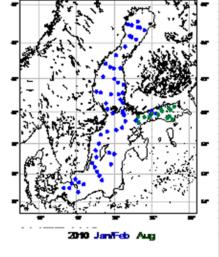












Baltic-C data base:

MERIAN and ALKOR cruises:

 O_2 , H_2S NO_3/NO_2 , NH_4 PO_4 , (SiO_4) C_T , A_T , pCO_2 continuously surface pCO_2

ARANDA cruises:

O₂, H₂S NO₃/NO₂, NH₄ PO₄, SiO₄ fluorescence total N, total P C_T, A_{T,} pH pCO₂ (surface)





Deliverables Workpackage 2

	D5	Seasonally resolved pCO ₂ fields for the entire Baltic Sea	2	12
\longrightarrow	D6	Seasonally resolved pCO ₂ fields for the entire Baltic Sea: Updates	2	24 (December 2010)
	D7	Improved process parametrizations (biomass production, nitrogen fixation)	2	12
\longrightarrow	D8	CO ₂ gas exchange balance	2	24 (December 2010)
	D9	Concentrations of inorganic/organic carbon species in the major model sub-basins	2	12
	D10	Compilation of existing CO ₂ /carbon data	2	6
	D11	Trend analysis for CO ₂ /carbon variables	2	12

Publications:

Schneider, B., 2010. The CO₂ system of the Baltic Sea: Biogeochemical control and impact of anthropogenic CO₂. In Schernewski, G. and Neumann, T. (eds.), Climate Impacts on the baltic Sea: From Science to Policy, Elsevier, (accepted).

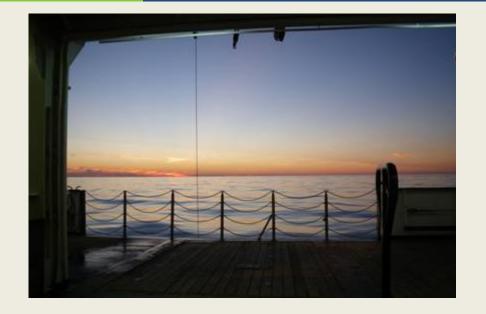
Schneider, B., 2010. PO₄ release at the sediment surface at anoxic conditions: Contribution to eutrophication?, submitted to Oceanologia.



Baltic-C-cruise with R/V "ALKOR", 30 June - 13 July 2010

Baltic - C

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