



## Four years of dissolved inorganic carbon dynamics along the Belgian coast

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CO<sub>2</sub> partial pressure (pCO<sub>2</sub>) of surface seawater along the Belgian coast (from the Scheldt mouth to offshore waters) is measured continuously since September 2000 from an autonomous system deployed on board of the R.V. Belgica. In parallel, 30 campaigns were carried on in that area to measure total alkalinity, dissolved oxygen, chlorophyll-a and nutrients (nitrate and nitrite, silicate and phosphate) from January 2001 to October 2004. We propose then to establish, compare and validate a one box LOICZ budget between dissolved inorganic carbon, phosphorus and nitrogen. And, to determine the CO<sub>2</sub> air-sea exchange, the Net Ecosystem Production and calcification with seasonal and annual variability for the outer Scheldt.