



Evaluation of metabolic rates in various benthic communities in the Bay of Revellata (Corsica) using optodes.

Willy Champenois (1), Gilles Lepoint (2), Bruno Delille (1), Marc-Vincent Commarieu (1), Marilaure Grégoire (2), Jean-Marie Beckers (3), and Alberto V. Borges (1)

(1) University of Liège, Institut de Physique (B5), Chemical Oceanography Unit, Liège, Belgium (alberto.borges@ulg.ac.be, +32-(0)4-3663367), (2) Oceanology Laboratory, University of Liège, Belgium, (3) G.H.E.R., University of Liège, Belgium

In the Bay of Revellata (Corsica, Mediterranean Sea), we investigate since late-2006 metabolic rates (gross primary production (GPP) and community respiration (CR)) related to various communities (Posidonia oceanica seagrass meadow, Posidonia oceanica litter, epilithic macro-algae) using optodes on benthic chambers over Posidonia oceanica seagrass meadow, Posidonia oceanica litter, epilithic macro-algae. Over the Posidonia oceanica seagrass meadow, these incubations allow to analyse changing rates of nighttime CR, and to evaluate the difference between daytime and nighttime CR. Over the Posidonia oceanica litter, these incubations reveal surprisingly highly variables GPP and CR values. Finally, these incubations also allow deriving GPP and CR values from epilithic macro-algae, the second most important benthic compartment of in the Bay of Calvi