N. Savoye

UMR EPOC, Univ. Bordeaux / CNRS

H. Agogué, Y. Bozec, P. Claquin, P. Conan, V. David, Y. Del Amo, E. Feuteun, N. Garcia, M. Giraud, G. Grégori, L. Lanceleur, B. Lebreton, Y. Leredde, A. Leynaert, A. Lheureux, C. Liénart, D. Marie, S. Mas, F. Mendès, L. Mousseau, B. Mostajir, D. Pecqueur, P. Raimbaut, P. Rimmelin-Maury, P-G. Sauriau, A. Sottolichio, E. Sultan, V. Ventrepotte, R. Vuillemin and the SOMLIT Team.

The water column of coastal systems shares interfaces with adjacent compartments (land, atmosphere and sediment). It is under the influence of highly dynamic physical, biogeochemical and biological processes that pattern their characteristics. These processes exhibit high seasonal and spatial variability and are subject to long-term changes due to climate change and anthropogenic activities.

In order to understand the seasonal to pluri-decadal variability of coastal systems and their environmental drivers, long-term time series of sub-monthly resolution are needed. The French Coastal Monitoring Network SOMLIT (www.somlit.fr) performs such time series within eight ecosystems since the mid-90's and more recently within five additional ones. These ecosystems are distributed over the whole littoral of the continental France. Surface water measurements and samplings and vertical profiles are performed every two weeks for a total of 17 physical, biogeochemical and biological parameters.

Objectives, scientific strategy and results, and the overall functioning (including quality management and data management) of the Somlit Network along with its integration within French research infrastructures and European connections (e.g. SeaDataNet) will be presented.

Results indicate that the physical, biogeochemical and biological characteristics of the studied ecosystems are 1) spatially structured along land-ocean and trophic-status (oligotrophic versus eutrophic regime of the ecosystems) gradients and 2) highly sensitivity to the climate variability and to the climate change.

Abstract for the theme 1: In-situ and remote sensing observations: towards a European Ocean Observing System (EOOS) in the framework of the UN Ocean Decade