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Simulating the interannual variability of the Adriatic Sea ecosystem dynamics

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The Adriatic Sea ecosystem dynamics has been simulated, under high frequency, interannually varying, surface forcing, with a coupled physical/biogeochemical modelling system composed by the Princeton Ocean Model (POM) and the Biogeochemical Fluxes Model (BFM).

The high frequency forcing for the modelling system is from operational atmospheric circulation analyses.

The preliminary simulations results relative to both the general circulation and the biogeochemical processes are assessed by comparing them with available and remotely sensed data.

Particular emphasis is put on the analysis of the biogeochemical processes variability induced by the strongly interannually varying circulation dynamics (current systems, dense water formation etc.) and by the variability in the Po river freshwater and nutrient forcing.