



Investigating the northern Adriatic Sea ecosystem state with a very high resolution model

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The northern Adriatic Sea ecosystem dynamics is simulated using the coupling of the BFM (Biogeochemical Flux Model) with the NEMO (Nucleus for European Models of the Ocean) model.

The modeling system is implemented at very high horizontal (~800 m) and vertical (95 z-level) resolution and is nested with a coarser scale Adriatic/Mediterranean model.

Simulation in hindcast and projection mode are being executed and are aimed to evaluate the ecosystem attributes (vigor, organization, resilience), in order to understand the ecosystem state of the basin with respect to the so-called "Good Ecosystem State" (GES) as defined by the EU-MSF9 Directive.

Skill of the model in replicating integrated environmental indices such as the EU-EEACS1023+ is also investigated.

Finally the model is also open to an off-line coupling with an higher trophic level (HTL) model.