

ADRIATIC

INSTITUTE: Alma Mater Studiorum Università di Bologna. Interdept. Environmental Science Centre

MODEL NAME: BFM-POM (Biogeochemical Fluxes Model– Princeton Ocean Model)

AREA OF APPLICATION: Adriatic Sea

MODEL DOMAIN: Adriatic Sea (model only open boundary located in the Ionian Sea at 39° lat N.)

STATE VARIABLES:

Nutrients

Nitrate

Ammonium

Phosphate

Silicate

Phytoplankton

Diatoms (Chl-a, C,N,P,Si)

Nanoplankton(Chl-a,C,N,P)

Picoplankton(Chl-a, C,N,P)

Dinoflagellates(Chl-a, C,N,P)

Heterotrophs

Heterotrophic nanoflagellates(C,N,P)

Microzooplankton(C,N,P)

Mesozooplankton(C)

Bacteria(C,N,P)

Non-living organic matter

particulate(C,N,P,Si)

Labile dissolved(C,N,P)

Semi labile dissolved (C)

Refractory dissolved (C)

Benthic

Benthic organic matter (C,N,P)

OBJECTIVES:

Investigate the impact of: Ocean circulation, Climate patterns, Eutrophication, Fisheries (implementation/coupling with OSMOSE.)

VALIDATION

Taylor diagrams