



## **Meso and macroscale interaction between physical phenomena and primary production in the Western Mediterranean Sea**

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The present study concerns the analyses of primary production distribution related to meso and macro scale phenomena characterizing Western Mediterranean Sea. This area was investigated by twelve oceanographic cruises since 2002 to 2007 ( MedGOOS 3, MedGOOS 4, MedGOOS 5 , MedGOOS 6; MedGOOS 7, MedGOOS 8, MedGOOS 9, MedGOOS 10 , MedGOOS 11, MedGOOS 12, MedOcc, MedGOOS 13). During the cruises physical, chemical and biological data were collected, processed and represented to obtain temporal trends of the interested variables and their comparison.

Data show that temperature of superficial water of the Sardinian Sea gradually increase such as salinity of the Levantine Intermediate Water (LIW) since 2002 to 2007.

Furthermore, analysis of water column turbulence indicate that, in Western Mediterranean Sea it strongly modulate the distribution of phytoplankton biomass and primary production.