

## RADMED-DOS monitoring program and IBAMar regional database, new tools for the Western Mediterranean Sea.

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### Abstract

The long-term monitoring of basic hydrological parameters in key places of the Mediterranean Sea like straits and channels or zones of dense water formation, is a priority in the context of global changes. The environmental monitoring that the Spanish Institute of Oceanography (IEO) has developed historically from 1995, has been reinforced from 2012 within the framework of the campaigns of RADMED-DOS project. RADMED ship work consists in four annual campaigns making transects along the Spanish Mediterranean coast and at key points like the Ibiza and Mallorca channels. Sampled variables are temperature, salinity, dissolved oxygen, chlorophyll-a, inorganic nutrients, phyto and zooplankton abundance and taxonomic composition, pH, total inorganic Carbon, nitrous oxide and methane.

IBAMar is a regional database that put together all physic biochemical data obtained by multiparametric probes (CTDs equipped with different sensors), in the cruises carried out by the IEO-COB. It has been recently extended to include bio-chemical data, part of them obtained from classical hydro casts using oceanographic Nansen bottles and reversing thermometers. The result is a database which include a main core formed by hydrographic data; temperature (T), salinity (S), dissolved oxygen (DO), fluorescence and turbidity, complemented by bio-chemical data; dissolved inorganic nutrients (phosphates, nitrates, nitrites and silicates) and chlorophyll \_a.

RADMED project and IBAMar database later results will be presented.