

Round Table on PRIMO, an International Research Programme in the
Western Mediterranean
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Most of the physical oceanographers interested in the western Mediterranean have the common will to involve all the available observational and theoretical tools during the same period of time in order to get answers as accurate as possible to some basic questions. This is the rationale for PRIMO, the acronym (in the language of most of the riparian countries) standing for "International Research Programme in the Western Mediterranean"; PRIMO is supported by both IOC/UNESCO and ICSEM.

Several meetings were necessary to reach a consensus on the fact that, first of all, we had to get a better understanding of the general circulation of the water masses. More specifically, we decided that the first step should be to focus on the seasonal variability of the circulation; the major reason is that some of us still disagree about the characteristics and driving forces for such a signal which is fundamental since the actual working of the whole sea, i.e. transformation of surface waters into deeper ones, is seasonal too.

Therefore, our strategy for the first step of this programme is to conceive an experiment based on the available observations and theoretical works and aimed i) to specify more accurately the major characteristics of the seasonal variability and ii) to check for all the mechanisms expected to be responsible for such a variability. Next steps will probably focus on mesoscale and/or regional phenomena.

The outline for an action plan, elaborated in June 1990 by a group of experts, will be presented during this round table to the whole community in order to be improved and definitively drawn up.

Water Masses in the Pagassitikos Gulf, Greece, in 1989

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Hydrographic data from four cruises in the Gulf of the Pagassitikos, during 1989, are seasonally evaluated.

A lower salinity water layer prevails at the surface all over the Pagassitikos Gulf, especially in summer, owing to the Aegean water entering the study area and the almost permanent stratification. In the surface of the Bay of Volos, the lower salinities observed at the NW part can result from the influence of the fresh water from the source "Bourboulithres" flowing into the NW end of the Bay. During August and November two water masses were observed, in the surface layer only, one in the Bay of Volos and another one in the remainder of the Gulf. However, there was only one water mass in February and May.

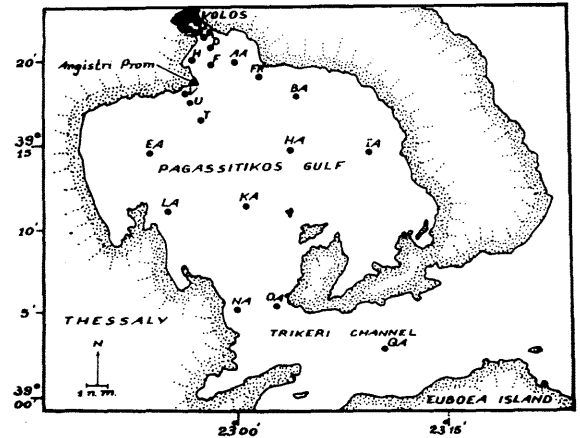


Fig.1 : The Pagassitikos Gulf, showing the positions of the hydrological stations.

At locations not deeper than 60m, the water column comprised mainly two layers, with the upper one as far down as 20m. At the deep stations (>60m), a third layer formed below 40 to 50 m. The thickness of the surface layer varied from 20 to 40m, depending on the season and the morphology. The higher temperatures and lower salinities in the surface layer were observed in August, owing to strong stratification. In Winter, the temperature dropped and the stratification became weaker, but persisted because of the halocline. However, in February, the water column was thoroughly homogeneous.

REFERENCES

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